The Golden Hands Encyclopedia of CRAFTS

The complete guide to traditional and modern home crafts

Volume 22

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Golden Hands Encyclopedia of

CRAFTS

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Marshall Cavendish

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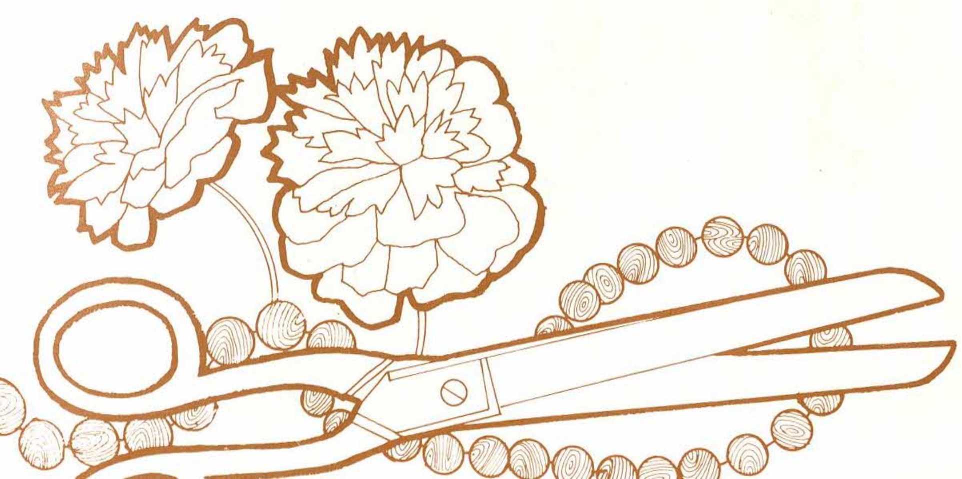

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Metrication
In this volume you will find two systems of measurement. The first set of figures refers to the metric system and the Imperial figures follow in brackets. Wherever possible, a commonsense approach has been adopted and both sets of measurements have been worked out in round numbers. **BUT BEWARE!** This means that metric and the Imperial figures are *not* equivalent so make sure you only work with one or other set of figures.

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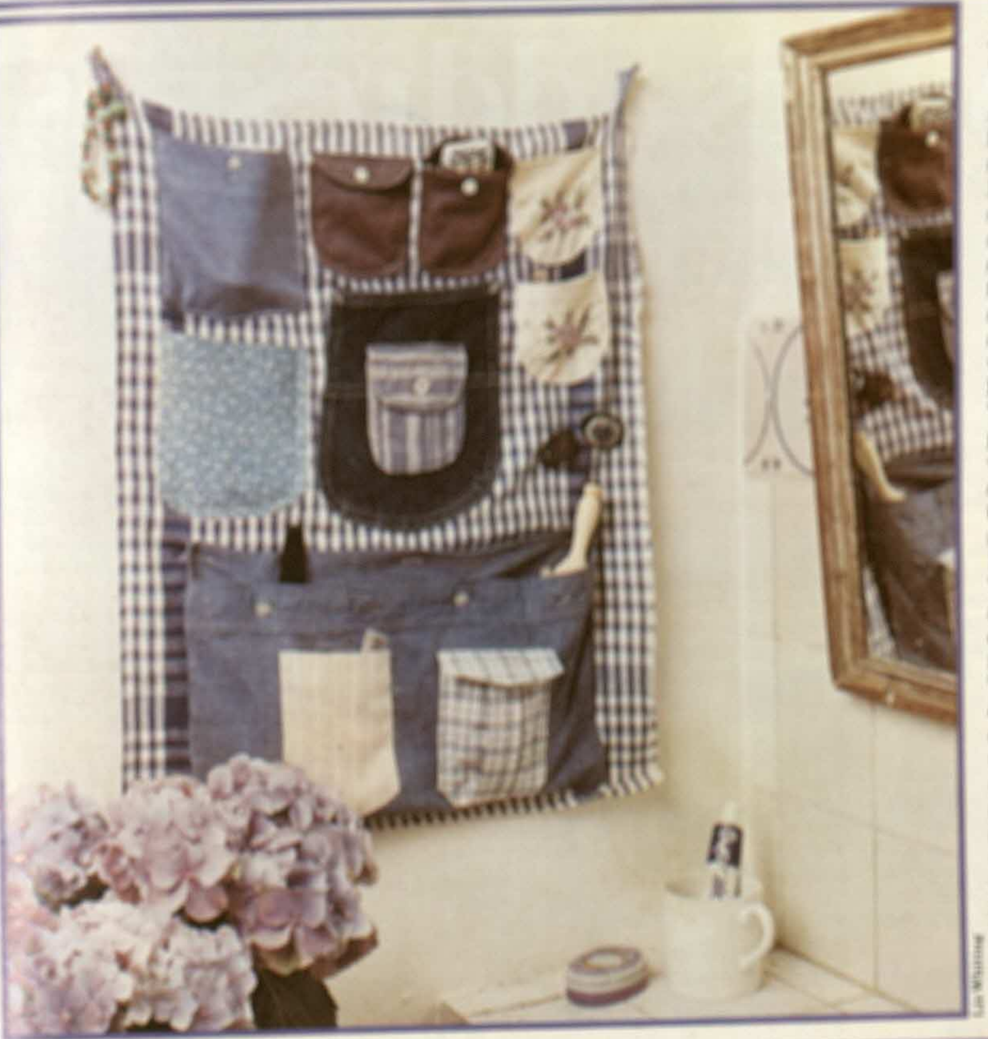


Keep the bathroom tidy and yet have brushes and potions all at hand.

Liz Whiting

Creative ideas 84

Hanging pockets

Fill these pouches with odds and ends which would otherwise litter a room. Suspended from the wall by fabric tabs hooked over two nails, they enable items to be neatly and conveniently stored.

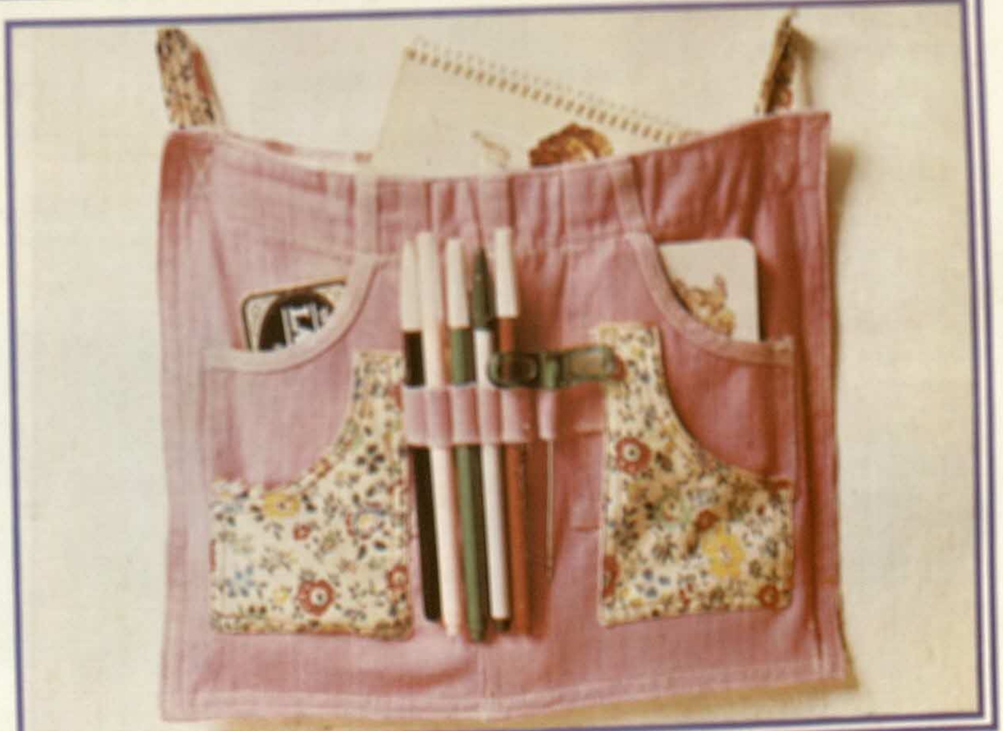
Created from a medley of old and new fabrics, these hanging pockets are also economical and fun to sew together. Existing pockets can be taken off garments and machine stitched on to backing fabric.

Each of the two versions shown in the photographs has been modified to suit a slightly different purpose. For holding small items, such as those often found in a bathroom, pockets are sewn directly on to a single fabric piece. Alternatively, additional pockets can be sewn on to one big pocket—which is well suited for holding a large notepad. With simple divisions for pens and pencils, this version is ideal for desk accessories. The edges of the divisions have been zigzag stitched, instead of hemmed.

When you are collecting an assortment of fabrics, choose those which are fairly similar in weight. This will ensure that all the different sections will take equal strain.

Choose colours which blend or contrast, but also consider at this stage the colour scheme of the room in which the hanging pockets will be placed.

On paper, sketch outlines for arrangement of pockets before cutting out and sewing together the fabric shapes.



Replace pens and notepads in the divisions and pockets when not required.

Japanese paper folding: origami

The word 'origami' comes from the Japanese verb *oru* (to fold) and the noun *kami* or *gami* (paper), and the craft of origami is often referred to as Japanese paper folding. Origami is a centuries-old tradition in Japan, although it is not known where in the Orient it originated.

Paper folding has always been a favourite pastime among children—there can be few of us who have not at some time made a paper hat or boat from newspaper or proudly carried home a water-lily made out of a sheet of paper from a school exercise book.

Adults too can find great satisfaction in transforming a single square or rectangle of paper into a complex shape, simply by folding it in various ways. Becoming proficient in origami is less a matter of skill than of practice. There is a limited number of basic folds and, once these are mastered, there is virtually no limit to the number of designs which can be created.

The designs described in this chapter are both decorative and relatively simple to make. As you progress beyond the basic steps and gain experience in the craft of paper folding you will be able to make models which spin, flap and pop, and, having copied the designs in this and the following chapter, you will probably wish to experiment with your own ideas for designs.

Another attraction of origami is that it can be practised almost anywhere. It takes up little space during construction and most designs can be flattened for storage.

Papers for origami

Any paper which will crease easily is suitable for origami. You can buy Japanese paper which is specially made for the purpose, coloured on one side and white on the other. It is usually obtainable in a pack containing many squares of different colours and is widely available from stationers and art shops.

Poster paper, metallic paper and patterned paper such as gift wrapping paper are also suitable, and newspaper is useful for a first attempt.

How to start

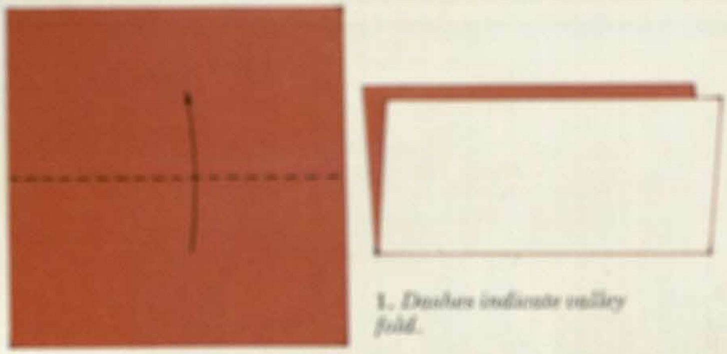
Precision and accuracy are very important requirements for successful paper folding, and both elements make the craft challenging for adults.

If you need a square piece of paper to create a design, make sure it is a perfect square. Firm and accurate creasing is also important.

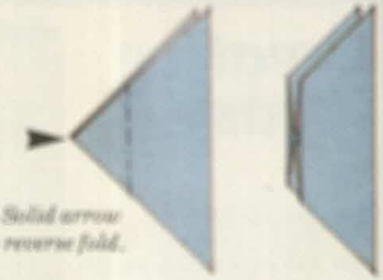
No knives, scissors or pins need be used in origami and you should always be able to unfold the paper figure back into the same square or rectangle with which you started.

When folding, bear in mind the final shape you are trying to make by looking forward to the next step shown. Do not expect your first attempts always to be perfect: a second try will often proceed more smoothly than the first because, having been through the stages once, you will be able to anticipate them the second time and folding will be less mechanical.

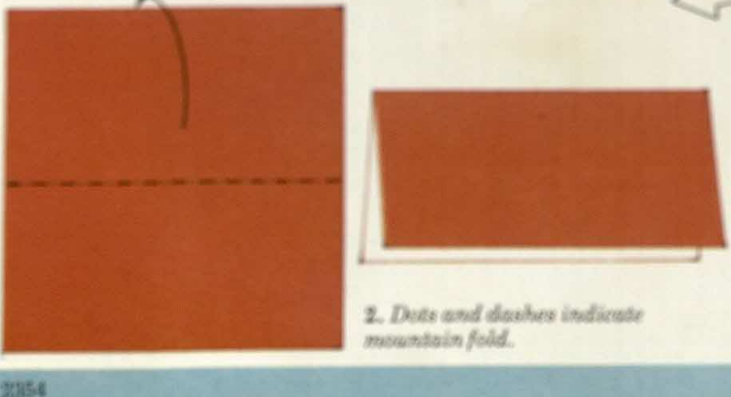
Start by studying the symbols (figs.1-4). The two basic origami folds are the valley fold (fig.1) and the mountain fold (fig.2), names which graphically describe the way in which the paper is creased. A solid arrow indicates a reverse fold (fig.3) and an outlined arrow indicates a hidden section which must be opened out (fig.4).



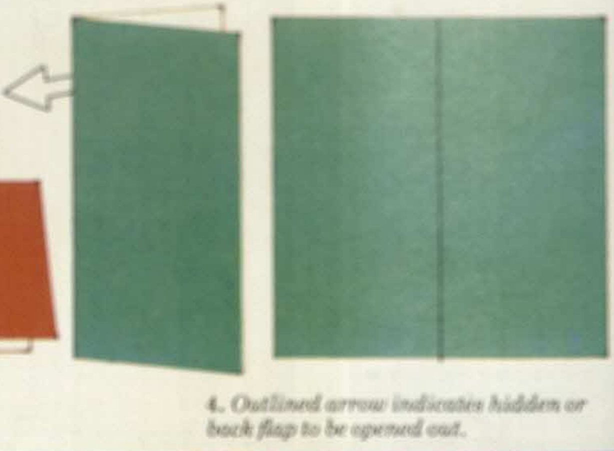
1. Dashes indicate valley fold.



3. Solid arrow indicates reverse fold.



2. Dots and dashes indicate mountain fold.



4. Outlined arrow indicates hidden or back flap to be opened out.

Put the magic tipper down on a flat surface and watch it tip over by itself.

Magic tipper

When the magic tipper is placed on a level surface, it will stand on its long edges unaided, then suddenly tip over. Use a square of thin paper such as the origami paper previously described, and follow the steps in figs 5-11.

☐ With the square of paper placed diagonally, fold two corners together to make a central vertical crease on the square. Open up. Valley fold edges to the central crease (fig 5).

☐ Valley fold the top point down (fig 6).

☐ Valley fold the top corners down so that they lie on either side of the central vertical crease (fig 7).

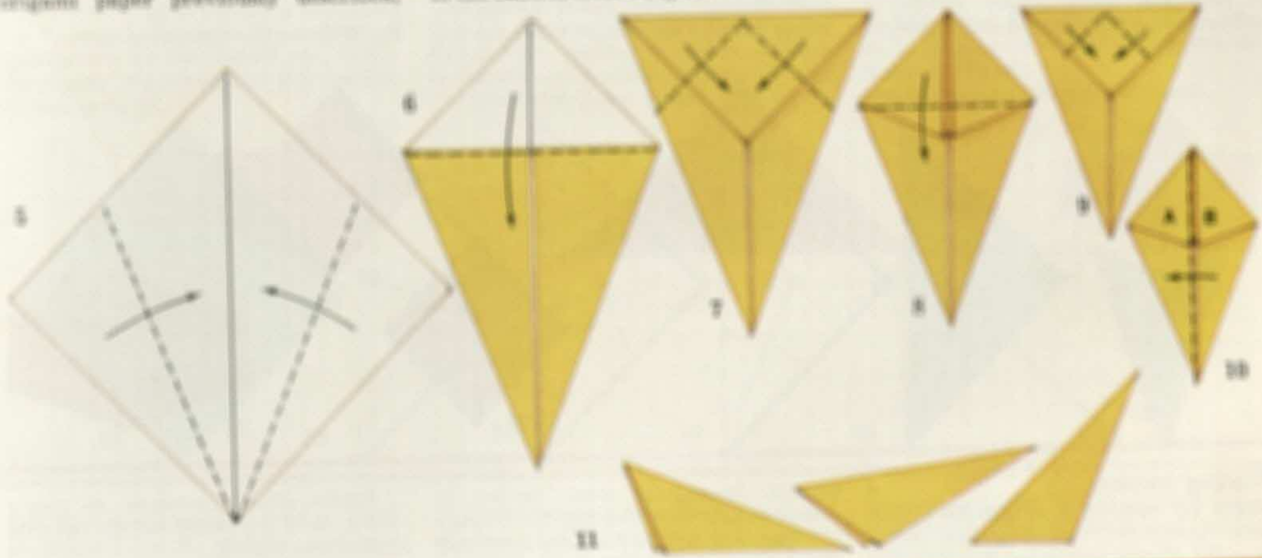
☐ Valley fold the top point down (fig 8).

☐ Valley fold the top corners down once more so that they line up on either side of the central line (fig 9).

☐ Valley fold the model in half vertically (fig 10).

☐ Place the completed magic tipper on its long edges on a level surface; wait for it to tip over on to its short edges (fig 11).

If the model tips over too quickly, it probably needs a sharper crease along its spine edge. If it does not tip over at all, first check that there is no tear along the spine, then make sure that flaps A and B (see fig 10) are pushing against each other inside the model. A slight readjustment of the flaps is sometimes necessary to allow this to take place. It is the action of flaps A and B which makes the model work.



Preliminary fold

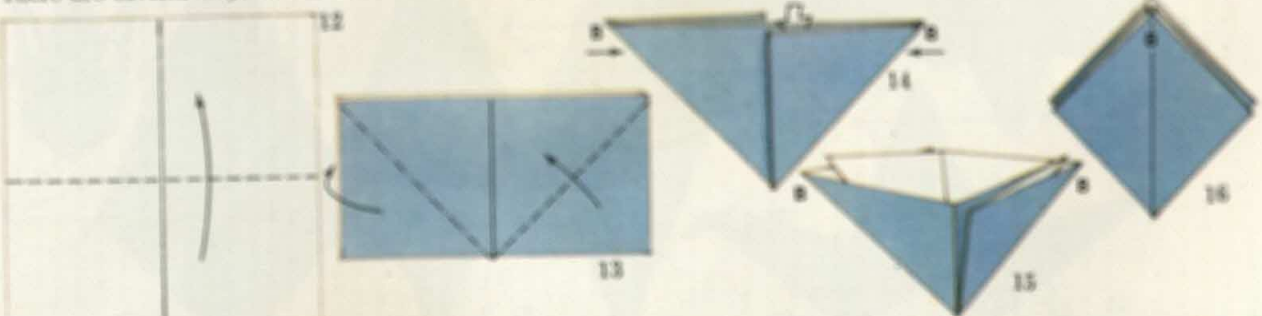
This simple fold is so called because it is the first step in making many different models such as animals, birds and flowers of varying complexity. There are several ways of making it; figs 12-16 show one of the simplest.

☐ Fold the paper in half vertically, then open. Fold the bottom half up to meet the top (fig 12).

☐ Mountain and valley fold (fig 13) to make shape shown in fig 14.

☐ Open out model from the centre (fig 15), pushing in the sides so that the two opposite corners B and B are placed together and facing each other.

Fig 16 shows the completed preliminary fold.



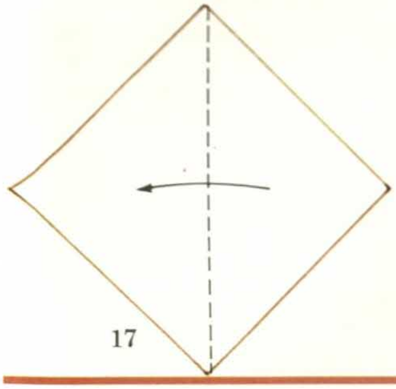
Walking penguin

For a real penguin effect, use paper which is black one side and white the other, white side up.

☐ Valley fold the paper in half from corner to corner (fig.17).

☐ Valley fold the bottom point towards, but just short of, the left-hand point. Make a crease and return the bottom point to the position shown (fig.18).

☐ Now bring the bottom point up again between the two layers (fig.19), using the crease line made in fig.18. (This is a reverse fold.)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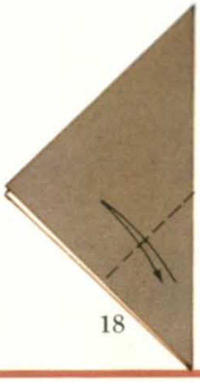
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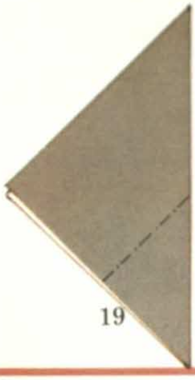
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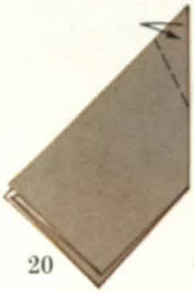
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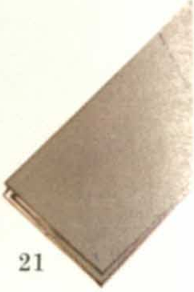
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Flower

This simple flower shape, known as *Toshi Takahama* in Japan, can be used with the leaves, which are also described, to decorate a greetings card. If you are using paper which is coloured one side and white the other, place it with the white side up.

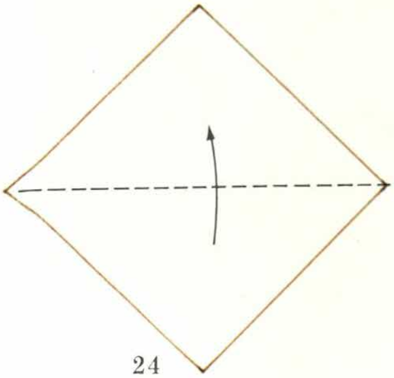
The method involves the 'squash fold', which means separating two layers of paper and re-aligning them along the creases already made.

☐ With the paper placed as shown, valley fold the bottom corner to the top corner (fig.24).

☐ Valley fold the side points to the top point (fig.25).

☐ Squash fold the right-hand flap (fig.26), so that the central fold A is positioned as shown in fig.27.

Fig.28 shows the completed flower.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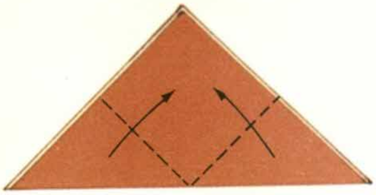
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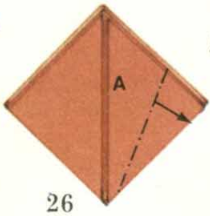

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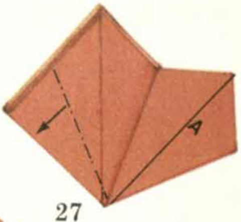

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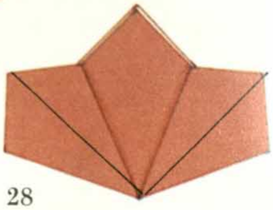
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Flying crane

Begin by making a preliminary fold (see figs.12-16), creasing the folds sharply.

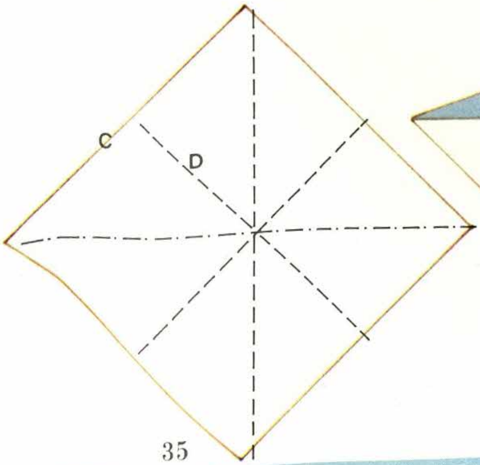
☐ Open the paper and lay it flat (fig.35).

☐ Valley fold edge C down to the central horizontal line, laying it exactly along this line (fig.36). Crease the fold thus formed from the left-hand corner to the fold line D (see fig.36).

☐ Open the paper again so that [illegible] have an additional crease line as [illegible] (fig.37).

☐ Repe[illegible] procedure at every cor[illegible] the paper has all the fold [illegible] (fig.38).

[illegible] all the sides of the paper up [illegible] at points E (see fig.38), to form [illegible] shape shown in fig.39. Crease all the edges neatly so that the paper lies



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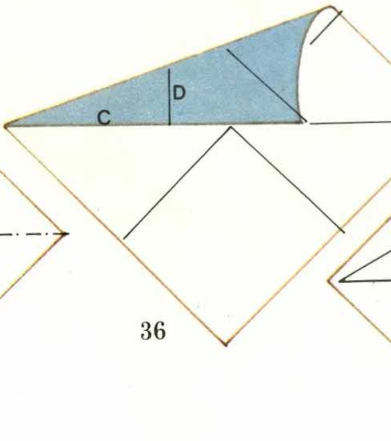

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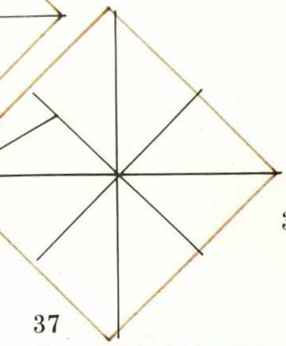
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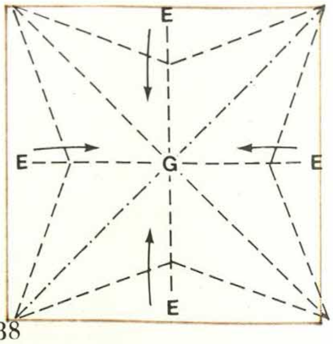

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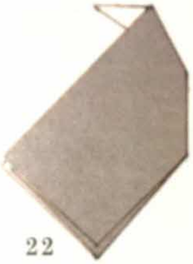
☐ Bring the top point down so that it projects at the left-hand side. Make a crease and return to the position shown (fig.20).

☐ Reverse fold the top point between the two layers (fig.21), using the crease made in fig.20.

Fig.22 shows the completed penguin.

☐ Place the penguin on a sheet of cardboard. Hold the board at a slight incline, rocking it gently from side to side.

The penguin will then start to waddle forward convincingly all by itself (fig.23).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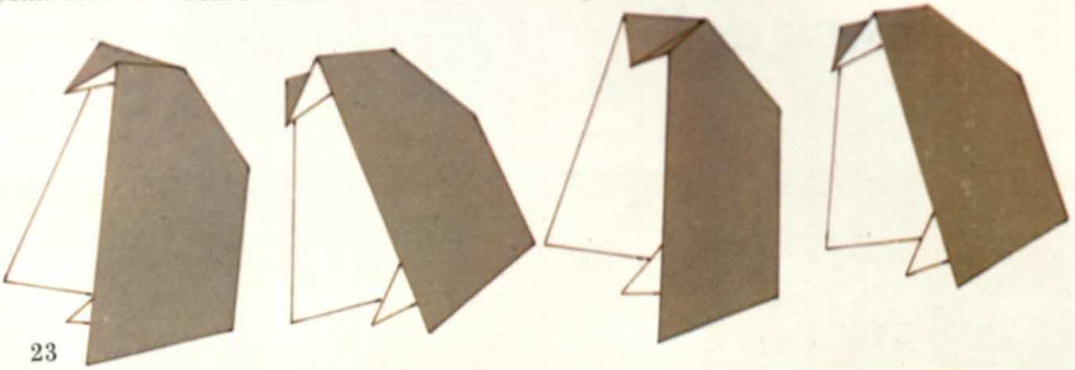
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Leaves for flower

Use green paper placed green side up.

☐ With the paper placed as shown, valley fold the left-hand corner to the right (fig.29).

Fig.30 and fig.31 show the method of preparation for the 'rabbit ear' fold—the raising of a triangular flap—which follows in fig.32.

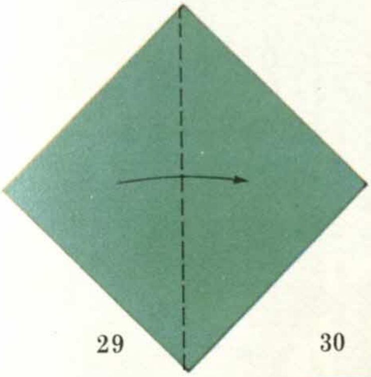
☐ Valley fold the lower diagonal edge (the top layer of the paper only) to the folded edge. Having made the crease, return to the original position (fig.30).

☐ Valley fold the upper diagonal edge (the top layer of the paper only) to the folded edge, making a crease. Return to the original position (fig.31).

☐ Now bring both diagonal edges to the folded edge, using the creases made in figs.30 and 31, pinching and raising the central corner to form a flap (fig.32). This is known as a 'rabbit ear' fold.

☐ Mountain fold the top point (the dark green area shown) down behind the front (fig.33).

Fig.34 shows the flower and leaves.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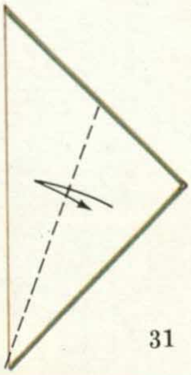
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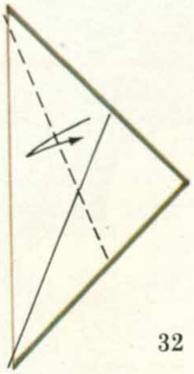
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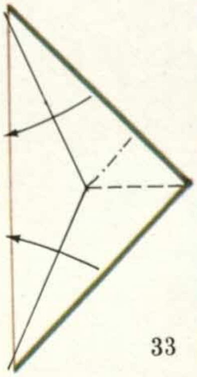
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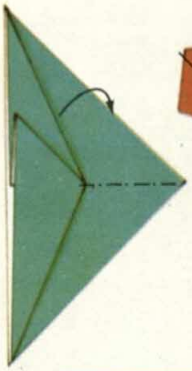
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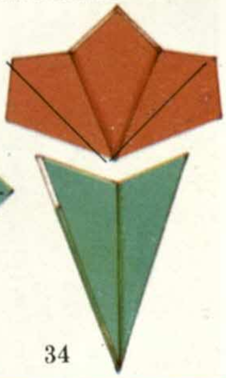
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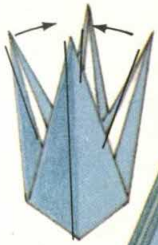
flat. Turn down points F over points G, at crease lines E, at front and back (fig.39).

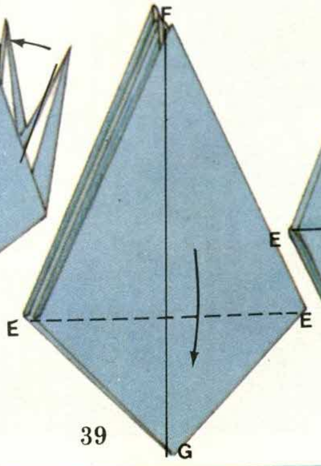
☐ With the paper positioned as shown (fig.40), fold the front left-hand flap over the right-hand flap, so that points E touch. Repeat with the back flaps.

☐ Turn the paper round to the position shown and pull down the top two points as indicated (fig.41), to form the head and tail of the crane. Reverse fold one flap along dotted line H, to form the beak.

☐ Fold up the flaps along lines E to E over each side of the crane's body, and then fold them down again along dotted line J, to form wings (fig.42).

Fig.43 shows the completed flying crane. Make several of these and hang them by threads through point K to make a mobile.





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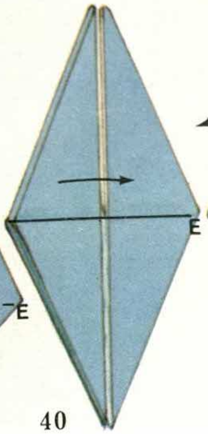

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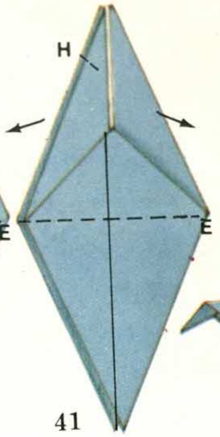

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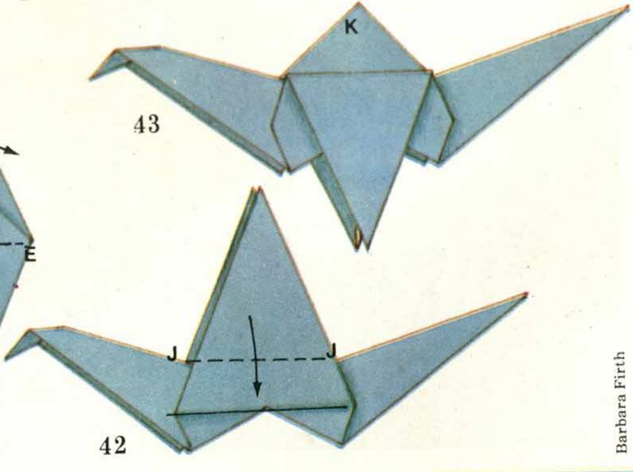

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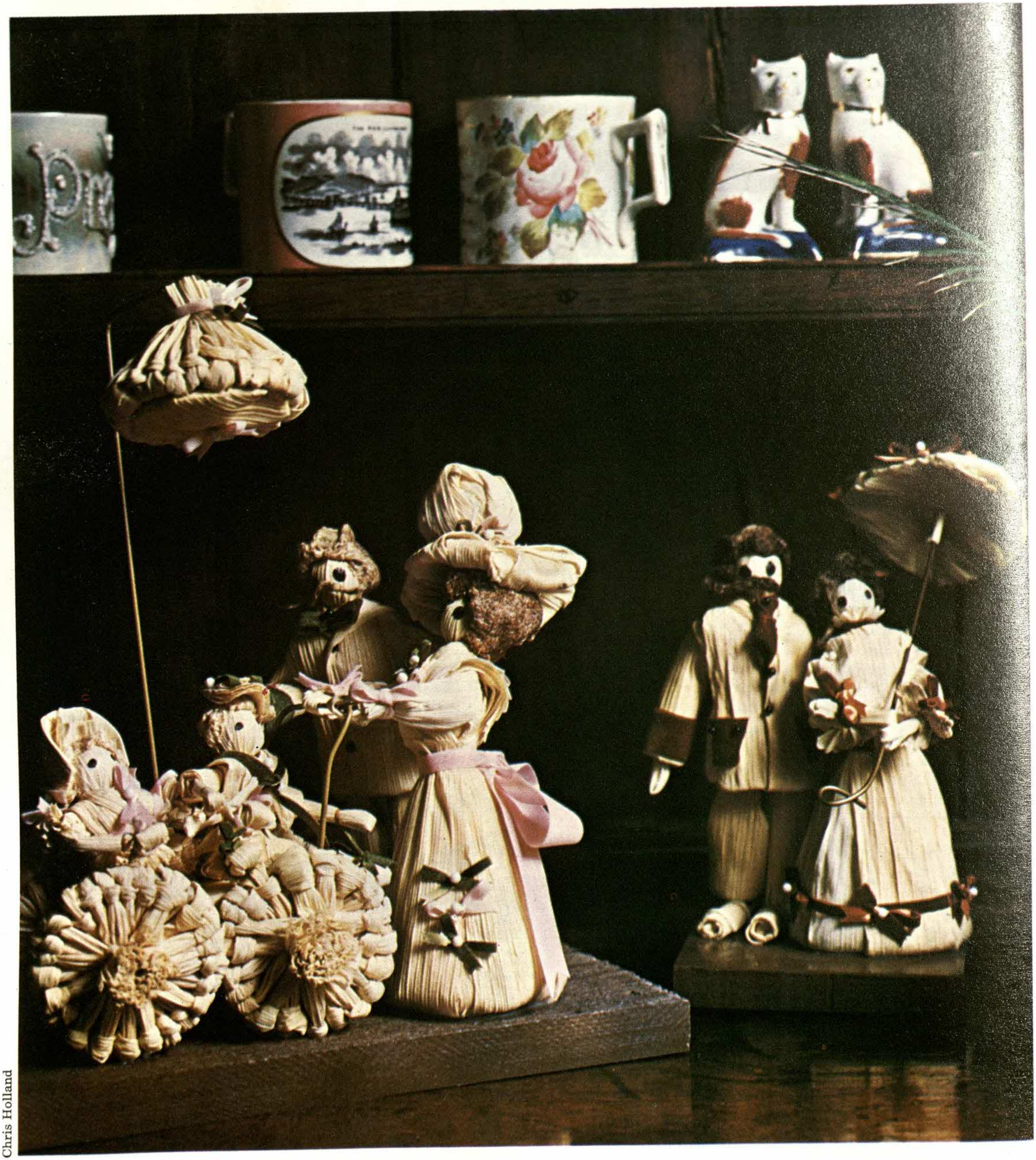
42

Barbara Firth

American corn shuck dolls

Making dolls from corn husks is an American craft originated by the colonists who made them to decorate their homes and as toys. Early settlers called their corn husks 'shucks', and so the craft has become known in America as 'cornshuckery'.

These dolls, made from corn husks, are a fine example of the American craft of cornshuckery.



Chris Holland

Corn husks can be, and have been, used to make flowers, masks, birds, animals, insects, machines, baskets and place-mats, as well as dolls, so they can be both useful and ornamental about the home.

All kinds of corn provide the raw material for the craft, including field, indian and popcorn. Sweetcorn is probably the most readily obtainable and has the additional advantages of possessing whiter inner shucks and being softer and more pliable to work. Shucks can be mixed—use the sweetcorn for faces and hands of a doll, and the coarser, darker textures of other shucks to make interesting clothes and colour contrasts.

Save the silky strands inside the shuck, as they are used for dolls' hair. Each doll takes about five hours to make and two weeks to dry. You always work with wet shucks, which are blotted on a towel. If you are unable to complete the work in one sitting, the entire doll can be re-dampened and finished later.

Corn dolls are made entirely by rolling and tying. No glue is used except for the hair.

Transworld

A family of dolls made from corn husks and dressed in period costume.

Preparing and selecting

Selecting the corn needs some care. Try to choose ears with as much silk as possible. Buy the ear unopened and avoid tearing down the shuck to look at the golden kernels inside. Remove the shuck very carefully with a knife—cutting round the corn at the top and the bottom, then slowly unravelling the shucks one at a time without tearing them.

This is the material from which the doll will be made and, as in sewing, you will need large pieces of material for sleeves and skirts. If you carelessly remove the shucks, you will have only strips with which to work. The cut at the top of the shuck should be high enough to give a long length and allow you to remove most of the silk in one clump, to dry separately and use for hair.

Drying and storing

When all the shucks have been cut, spread them individually in the sun to dry. Do not dry them in an oven, where even the lowest heat dries a shuck too quickly and makes it too brittle to use. On hot summer days, drying will take only a few days but in autumn it may take as long as a week. Make sure the shucks are completely dry before placing them in a polythene bag for later use or some may mildew. When you have enough, store the bags in a dry place.

If you gather shucks at seasonal intervals, you will find that early corn has blond corn silk, mid-season corn has silk suitable for red-headed dolls and late corn silk makes beautiful brunettes. A bouffant hair-style will take the silk of about five ears of corn. Let the silk dry thoroughly in the sun for three to five days. Sort by colour and store in polythene bags separately from shucks.

Remove all the silk from shucks as, if it gets in between the ribbed surface of the shuck it will dry there like cement and if left on a finished doll it will spoil its clean and elegant look.

Colouring

The natural colours of shucks range from clear, pale greens to soft beiges and browns. However, they can also be coloured with dye (see box).

Corn shuck dolls

Instructions are given for a man and a woman doll, 18cm (7″) high.

You will need:

About 12 dried sweetcorn shucks per doll, plus 60 shucks to dress the pair.
Dried corn silk.
Sharp scissors and pinking shears.
Wire cutters.
Floral stem wires, 35cm (14″) long.
Strong, gold coloured thread.
12 coloured pins with heads.
Several sheets of white tissue paper.
Small, fine-pointed paintbrush.
Acrylic or water-colour paints for faces.
A large towel.
Plastic dish, big enough to soak shucks.
Cocktail stick or toothpick.
Clear-drying glue.

You will be making two dolls at the same time, up to the moment when the woman receives a skirt and the man legs and a coat.

☐ Soak 20 of the whitest shucks in the plastic dish and work on the towel.

☐ Cut two 9cm ($3\frac{1}{2}$″) pieces of stem wire, one each for the body of each doll.

☐ Cut two 15cm (6″) pieces of stem wire for arms, one for each doll.

☐ Cut one 28cm (11″) piece of stem

Dyeing grasses

Corn shucks and dried grasses, such as raffia, can be dyed very successfully.

Use a dye such as Dylon's Multi-Purpose dye, dissolved in half the recommended quantity of boiling water.

Test-dye a sample of the grass and check the results after half an hour: if too dark, add more water to dye bath; if too light leave the sample in the dye bath for a longer period of time—it is possible to obtain very intense colours.

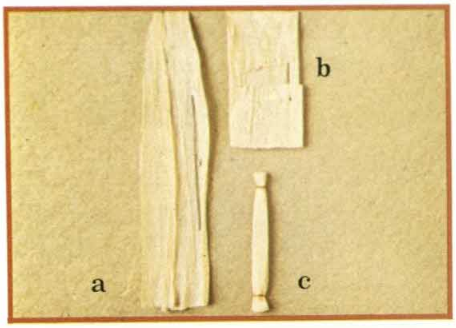
Rinse carefully and allow to dry. As it is not possible to rinse grass as thoroughly as fabric after dyeing, care should be taken when combining dyed and undyed grasses (especially if they are damp) as the dye might run or smear.

wire for man's legs. (Woman has skirt, so no legs needed.)

☐ Cut about twenty pieces of thread, each 63cm (25″) long.

☐ Select two soaked shucks from the dish and gently blot them on towel. Use this blotting method throughout.

Bodies. Place one of the 9cm (3½″) wires lengthways on a shuck next to the edge (fig.1a). Fold top and bottom of shuck over ends of wire (fig.1b), then roll the wire up in the shuck.



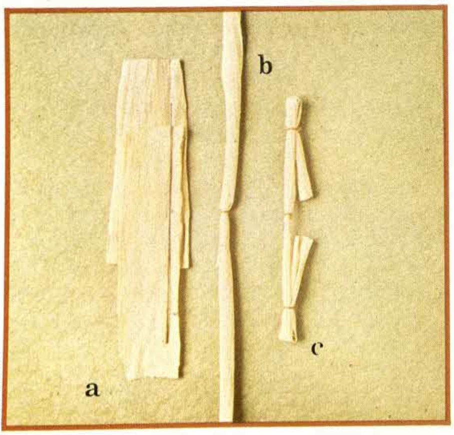
1. *Making the body.*

☐ Using a piece of 63cm (25″) thread folded double, tie each end of the rolled shuck (fig.1c). To do this, place the middle of the double thread about 6mm (¼″) from the end of the rolled shuck, wrap it round twice and tie in a double knot (this knot is used throughout). Trim off excess ends of thread. Do the same thing at the other end of the shuck.

☐ Repeat this process for the second body.

Arms. Use two 15cm (6″) pieces of wire for the arms, one for each doll. Try to select shucks of even length, width and colour, then the dolls' hands at the end of the arms will be identical.

☐ Select four shucks. Using two shucks overlapped to extend the length to 20cm (8″), place one wire next to the edge of the overlapped shucks as for body, but this time without tucking in ends (fig.2a). Roll and tie the centre tightly to hold wire and shucks in place (fig.2b).



Kim Sayer

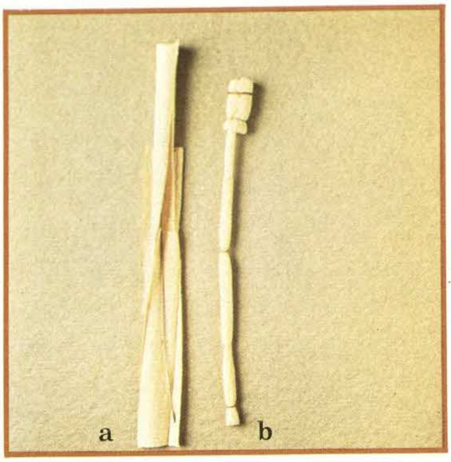
2. *Assembling the arms.*

☐ Find the one end of the wire amid the rolled shuck and place your thumb on it. Gently bring the end of the shuck over the wire and tie about 19mm (¾″) from the end to make a loop for the hand.

☐ Repeat at the opposite end of the wire. Do not cut off extra shuck past the wrist as this helps to fill the sleeves (fig.2c).

☐ Repeat with the second 15cm (6″) piece of wire. Use the cocktail stick to open the loop without tearing the shuck.

Man's legs. These are made from the 28cm (11″) wire. Use the same method as for bodies (see fig.1), since loops are not needed.



3. *Making the man's legs.*

☐ Roll legs from three shucks which have been overlapped to make up the extra length of 33cm (13″) as shown in fig.3a.

☐ Tie at each end, 2.5cm (1″) from the end. Mark the middle with a knot of thread, so legs will be equal.

Shoes. Use two shucks, one on top of the other, for each shoe.

☐ Fold both ends under towards the centre to make a piece 7.5cm (3″) wide.

☐ Roll the two pieces 3.75cm (1½″) on to the end of the made-up leg.

☐ Tie tightly at ankle and toe (fig.3b). Repeat for other shoe.

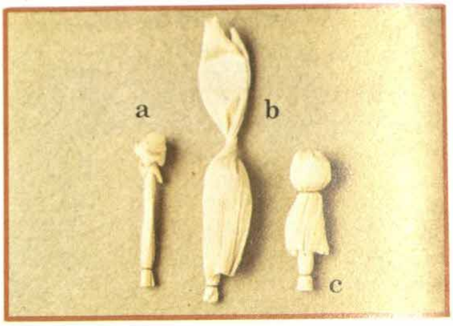
Heads. These must be as round as possible.

☐ Fold thread double, ready to tie and knot. Select two shucks and lay one on top of the other, making double thickness. (If only one shuck is used, it tends to split.)

☐ Select two extra shucks for filling. Holding one 9cm (3½″) rolled body, take the two filling shucks and tightly twist and wrap them round the top quarter of the body to make a ball (fig.4a).

☐ Place the double shucks over the front of the body holding the covering shucks in place with your thumb. At the top of the 'head', give the covering shucks a full twist round (fig.4b) and bring them down behind the back of the head to produce a roundness.

☐ Tie twice with double thread tightly round neck below the ball and knot at the back (fig.4c). Make sure the front of the head is as smooth as possible. Do not cut off the extra shucks below the neck knot unless they cover the bottom knot on the body, as they will help fill the chest cavity.



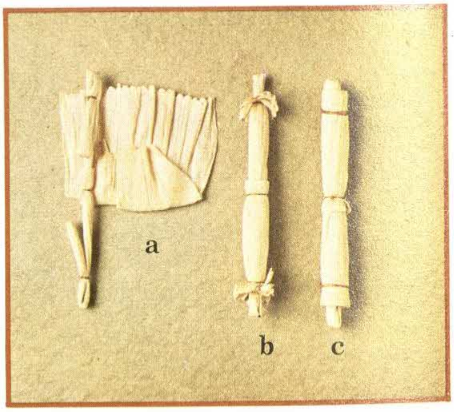
4. *Shaping the head.*

☐ Repeat with other body piece.

Assembling and dressing. Soak about 60 more shucks and cut more lengths of thread. Make sleeves first, assembling them on arms before attaching to doll. One set of arms will be for the woman's fancy sleeves, the other for the man.

Woman's sleeves. Use eight shucks, four overlapping widths for each arm.

☐ With the widest part of the overlapping shucks towards the doll's hands, fold under the ends of the shucks about 2.5cm (1″) to meet at the centre of the arms. At the hand end of the arm, cut shuck edges with pinking shears (fig.5a).



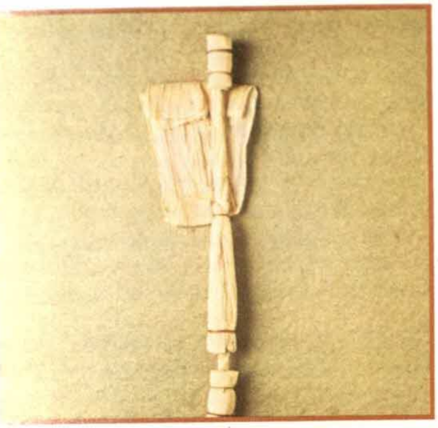
5. *Sleeves for the arms.*

☐ Roll all four shucks round arm, tie tightly at wrist and at centre arm Make the other sleeve the same way (fig.5b).

Man's sleeves. Use eight shucks and proceed as for woman's sleeves except that at the hand end of the arm, fold the shucks under—just past the middle of the hand—to give the sleeves a hemmed look (fig.5c).

Trousers. Use four overlapping shucks for each trouser leg.

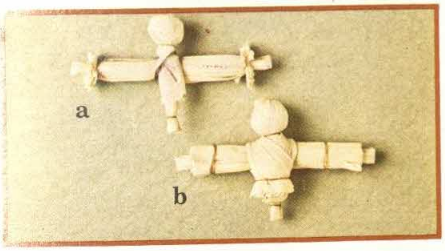
☐ Measure shucks from just past centre of leg to top of shoes. Fold under at both ends to give hemmed look. Do not cover the top of the shoes as the foot will have to be bent later (fig.6). Tie tightly in centre and loosely at cuff.



6. *Four shucks form a trouser leg.*

Woman's chest. Lay sleeves horizontally across top of body, allowing a small space for the neck.

☐ Cut a 15cm (6″) piece of wire and, winding diagonally from waist to shoulder to waist again, wire arms to body securely (fig.7a).



7. *Arms are wired to body.*

☐ Fold one or more shucks in a 2.5cm (1″) square and lay it on the chest over the wire criss-cross.

☐ Take four shucks, two doubled from the front and two doubled from the back, and criss-cross them over the square to hold it in place. Tie tightly with thread at the waist.

(On both dolls, when you bring the shucks over the shoulder, push them into the neck to prevent a hunched appearance.)

☐ With pinking shears, cut two strips from a shuck and criss-cross these over the chest as a final touch for a woman's blouse. Wrap thread round waist twice and tie. Make sure you can see the bottom body tie. If you cannot, trim off excess shuck.

Man's body. Use same method as for woman but leave out the folded square on the chest and use only four shucks to make the chest (fig.7b).

Woman's skirt. Either overlap shucks round bundles of rolled shucks to make a full skirt or, for a more economical method, wrap tissue paper round the centre body. Then apply about ten overlapping shucks to cover the tissue paper. Tie at the waist with thread, turn in the edges of the shucks at hemline and stuff with more tissue until dry. Tie three shucks together in a line and tie round bottom of skirt for decoration.

Man's legs. If you are unable to see the bottom of the body knot, trim shucks.

☐ Find the centre of the legs and bend them in half. Make a wire hook and insert it into the bottom of the body at the knot.

☐ Bending each shoe at the ankle, lay legs on top of the hook on the body and press hook tightly on to legs.

☐ Use five shucks, four to wrap round the legs, one for a good finish. Starting from the back, wrap between legs, round one leg and up round the waist.

☐ Repeat with second shuck on the same leg, then do the same thing with two more shucks for the second leg.

☐ Fold the fifth shuck under top and bottom and fold in half again lengthways. Place it between the legs with neat edges showing to give a finished look.

Man's jacket. Use eight shucks, four for the front and four for the back of the jacket.

☐ Spread out four overlapping shucks. Turn up about 19mm (¾″) at the bottom edge of the shucks.

☐ Lay the man on top of the shucks so that the folded edge is just below the split in his legs.

☐ At the back of his neck, separate the four shucks and bring them in pairs over the shoulders to the front. Pin all four where they cross at the centre of the chest with coloured pins.

☐ Take the other four shucks, overlap them, fold under as for back shoulders just below the split in the legs and pin at the middle of the waistline.

☐ Take two pairs of shucks and turn at an angle from the top of the waist, pin to make lapels, then pull the pairs of shucks over the shoulders and pin down at the back. Trim off excess shucks at the back.

☐ Pin all shucks under the sides of the arms. Tie jacket in place with sash made from two shucks knotted together.

Hair. Work clear-drying glue into a walnut-sized amount of corn silk until there is enough glue to hear it crunch between the fingers as you work it.

☐ Form it into a pancake and use fingers to mould the desired hair-style, bringing it in close to the head round the neck.

☐ For extra curls, roll a small amount of well-pasted corn silk in a matching colour and add that. When the glue dries, the hair will keep in shape.

Finishing. Arrange the dolls' limbs into position while still wet and let the dolls dry for two weeks in an even temperature. Turn occasionally, so they dry thoroughly, inside and out.

When dolls are completely dry, paint on faces with acrylic or water-colour paints.

Dolls can be preserved by spraying them when dry with inexpensive hair spray (this contains lacquer), but do not spray too generously.

Dolls designed by Margo Daws Pontius.

Steve Bicknell

How to make and fit cupboards

Doubling up the rectangular unit described in Carpentry chapter 27, page 2350 produces a 50cm x 200cm (20″x 79″) unit. Made with a depth of 61cm (24″), this unit can be used as a wardrobe in a bedroom. A shallower unit of 38.1cm (15″) could be used in the kitchen. The height of the unit is sufficient to hang clothes or to take brooms and mops.

Wardrobe

The following instructions are for making a wardrobe 61cm deep. The interior can be arranged to make it a full-length hanging cupboard or pull-out shelves can be fitted to take smaller items of clothing. Fig.1 shows two combined units mounted on a plinth (see Carpentry chapter 25, page 2280). The instructions are for one unit.

You will need:

Two pieces of 16mm chipboard, 196.8cm long and 610mm wide—for the sides.

Two pieces 16mm chipboard, 46.8cm long and 610mm wide—for the top and bottom. Four pieces 16mm ramin batten, 61cm long.

6mm dowelling 60cm long.

One piece 16mm chipboard, 199.4cm long and 494mm wide—for lay-on door —or 196.8cm long and 468mm wide—for an inset door.

One piece of 16mm chipboard 46.8cm long and 59.5cm deep—for shelf.

Tools, as for previous chapters.

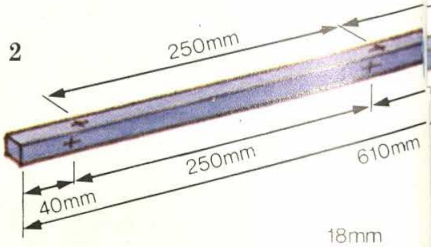
Hinges (see Carpentry chapter 25).

Construct the unit following the same

1. *Wardrobe with hanging space.* **2.** *Positions on batten for dowels.* **3.** *Glide rail for wardrobe.* **4.** *Pull-out shelves.* **5.** *Kitchen cupboards.* **6.** *Packing strip cut to width of runner.*

1

2



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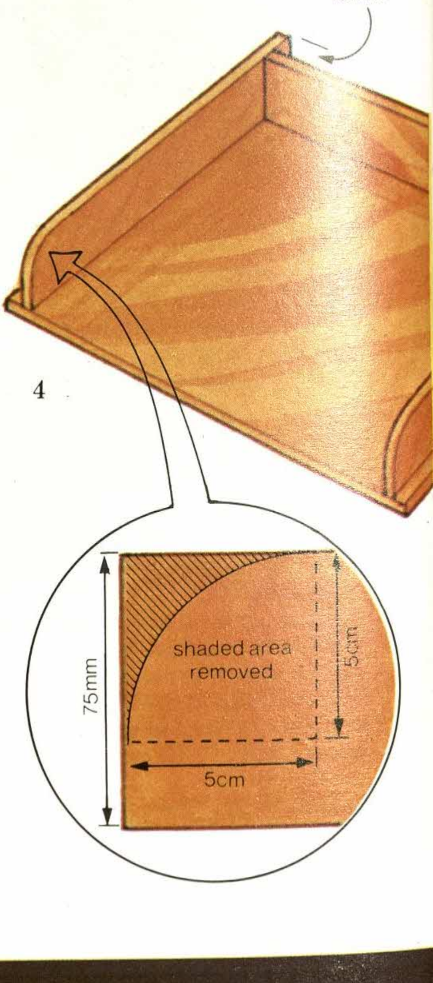


techniques described in Carpentry chapter 24, page 2250. The holes in the battens for the dowelling are situated as shown in fig.2.

A fitted cupboard (see fig.1). For this, fix a shelf 36.8cm from the top. Dowel joint the shelf to the sides using either the nylon recessed fitting or the screw eye and slot method described in Carpentry chapter 27.

Screw fix a glide rail (fig.3) to the underside of the shelf to carry coat-hangers. The merit of this fitting is that it allows the garments to be slid apart easily when removing or placing them in the cupboard. The upper section of the shelf can be used for hat or blanket storage.

Pull-out shelves. Each shelf consists of a base, two sides and a back. Instructions for making up one shelf are given here. The shelf slides on plastic runners.

You will need:

One piece of 12mm plywood, 59.5cm long and 462mm wide—for the base.

Two pieces 12mm x 75mm softwood, 57.6cm long—for the sides.

One piece 12mm x 75mm softwood, 41cm long—for the back.

Two plastic drawer runners 59.5cm long.

No.8 chipboard screws 1.2cm long.

☐ Screw the runners to the sides of the unit. When fitting a series of shelves fix the runners 13cm apart.

☐ Shape the front ends of the sides as shown in the inset, in fig.4.

☐ Using a butt joint assemble sides and back with glue and pins. The back should be set 1.8cm in from the back of the sides (see fig.4). Then glue and pin the sides and back centrally on to the base with the back ends of the sides flush with the back edge of the base.

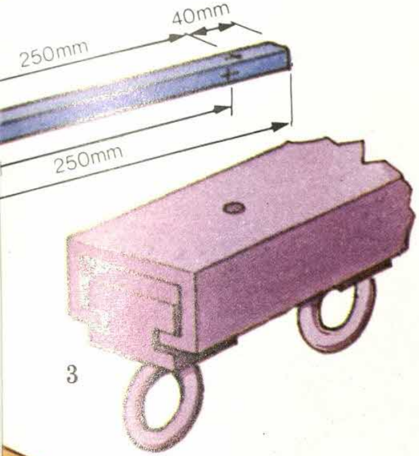
☐ Paint or stain as required.

Kitchen cupboard

A kitchen cupboard need not be as deep as the wardrobe. The interior of the cupboard can be adapted according to your needs. A full-length cupboard is ideal for storing brooms, mops and other large items, whereas smaller objects can be housed in storage baskets. Fig.5 shows these two interior layouts.

Storage baskets. Banks of storage baskets can be used in a kitchen cupboard to store dry goods. The baskets come in two depths, 23cm and 10cm, and are available from a number of firms.

To fit a wire basket 10cm deep, screw fix plastic drawer runners, 59.5cm long and 13cm apart, to the sides of the cupboard, packing the runners out from the sides with a strip of 6mm plywood (fig.6). The top edges of the wire basket run freely in the plastic runner.



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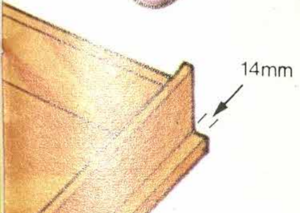

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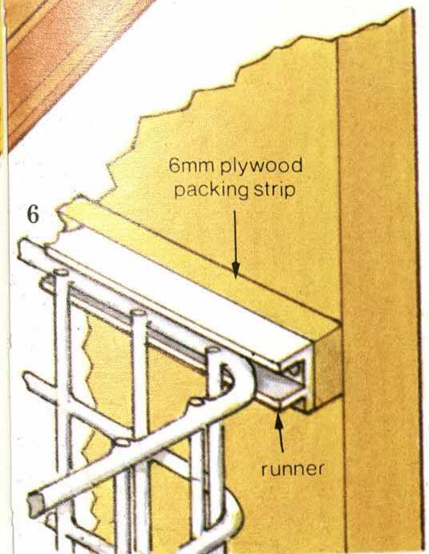

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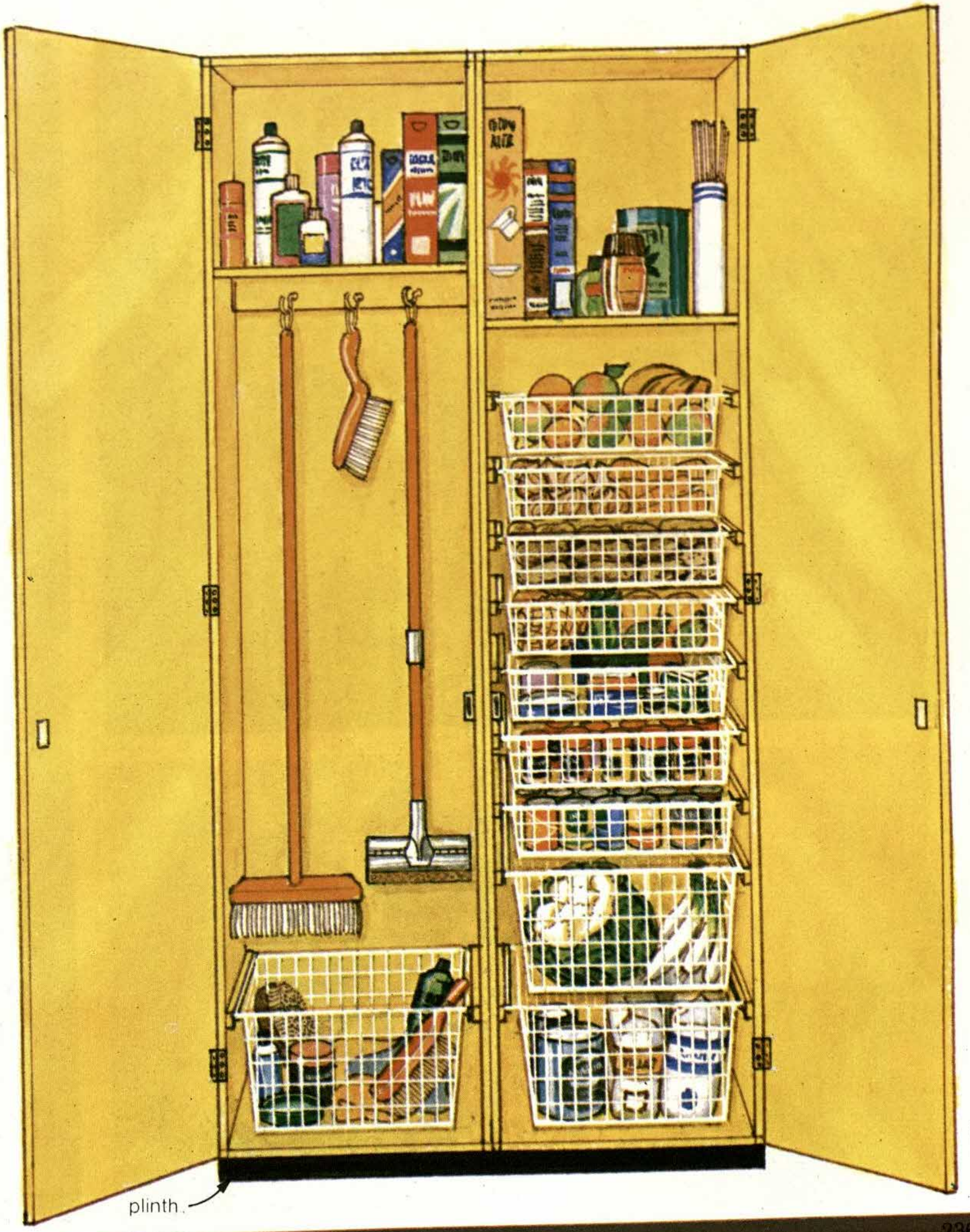


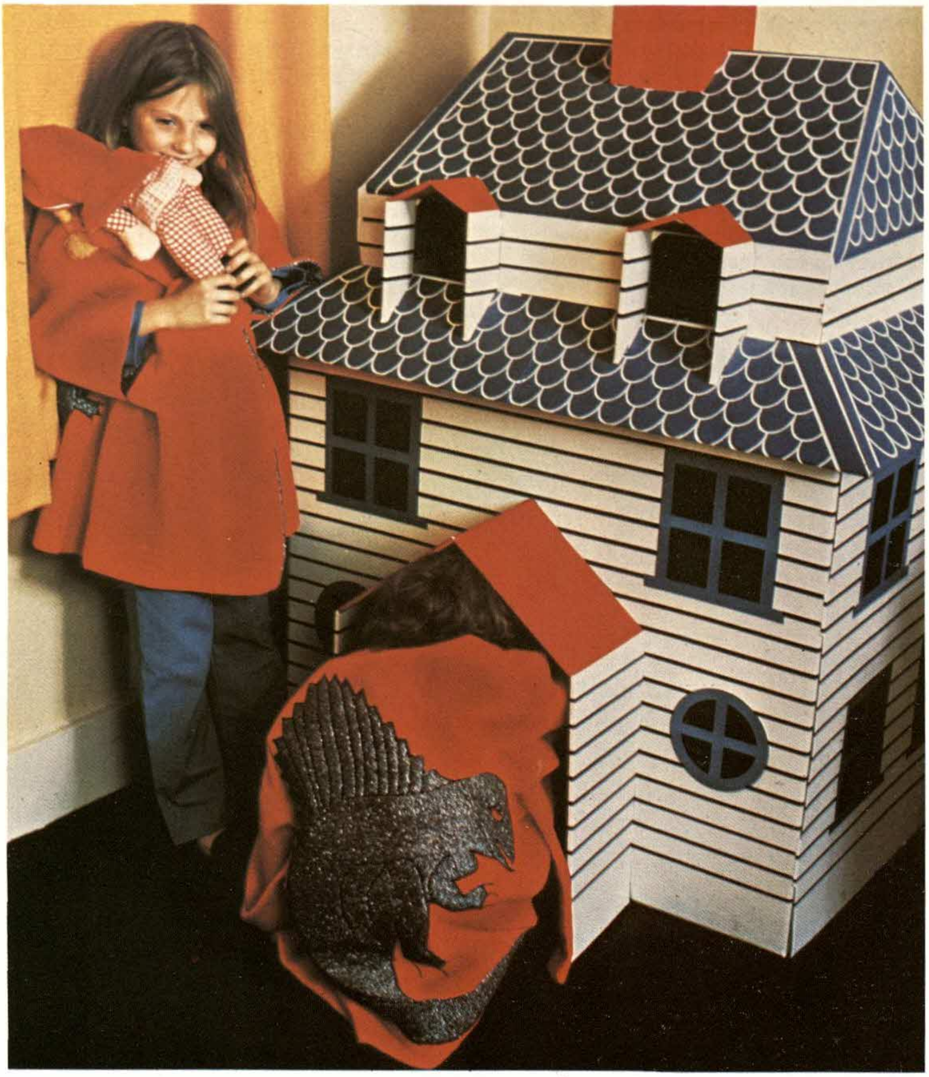
Paul Williams

Child's 'monster' dressing-gown

Cloth — sewing 27

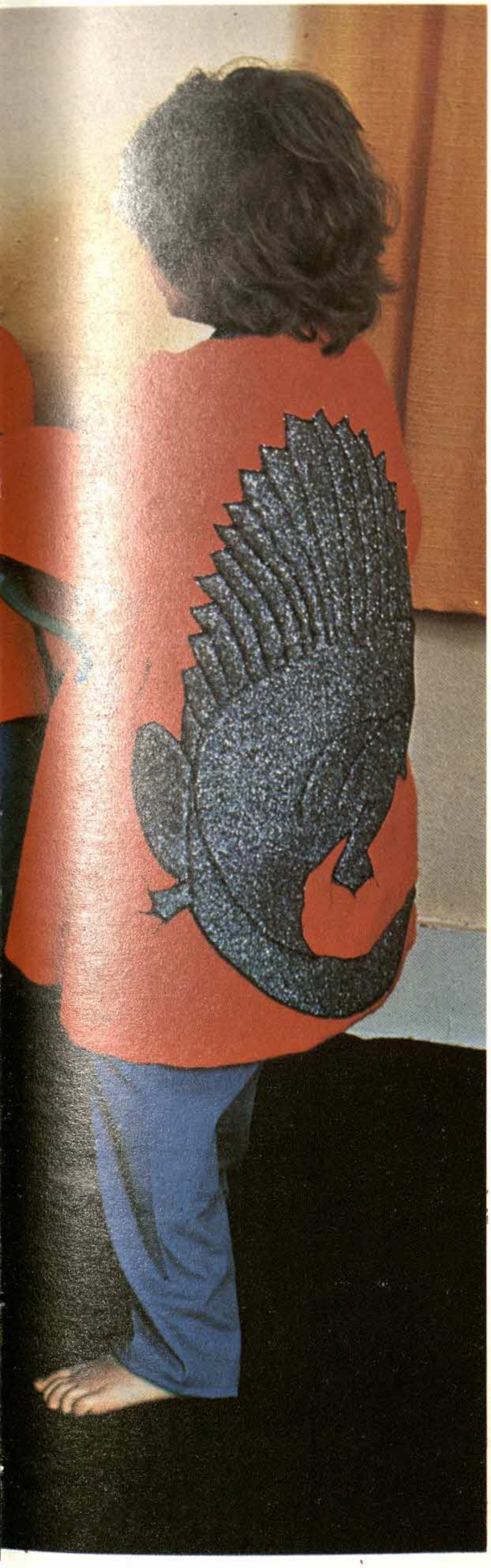
Here are instructions and a pattern for a dressing-gown that a child will actually want to wear. Bedtime will become fun with this unusual—yet utilitarian—garment, trimmed with a splendid prehistoric monster on the back.

The dressing-gown and monster were worked in warm washable fabrics. Thin plastic foam sheeting was used as a backing fabric for the quilted



Kim Sayer

appliqué, but this could be replaced by conventional wadding for a lighter, but less 'bumpy' finish. The dressing-gown has useful slit pockets and a belt which ties at the front and is stitched in place at the sides to prevent it from getting lost.



Turn a dressing-gown into a fun garment with a splendid appliquéd monster. Designed by Sheila Brull.

The pattern is designed to fit an average seven year-old. The dressing-gown is amply cut, however, so a child will not grow out of it quickly.

The finished length of the garment is 67cm (26½"), but you can easily lengthen the pattern for an older child. Lines for such alteration (including the sleeves) are indicated on the graph pattern overleaf.

The secret of easy success is to use a sewing machine that works a zigzag stitch—both for seaming and for stitching the appliquéd monster. The elasticity of zigzag stitching is particularly suited to jersey-based fabrics, such as the two main fabrics involved. Using a zigzag stitch is the most efficient way of applying the monster to the back of the dressing-gown since the raw edges are simply covered by stitching and do not need to be hemmed. A zigzag stitch is also useful for neatening all the other raw edges involved (though an overlock stitch is even better).

It is possible to use a straight machine stitch for seaming if you do not have access to a machine with a zigzag attachment. In this case, the appliqué would have to be worked by hand and the monster's body details in embroidery but this is obviously a much more laborious process. (For hand worked appliqué see Appliqué chapter 2, page 350.)

The pattern

Graph patterns are given overleaf for both dressing-gown and appliqué monster. A 1.5cm (⅝") seam allowance is included on the graph pattern for the dressing-gown, except where the edges are to be bound. A 5cm (2") hem is also included in the pattern.

You will need:

Graph paper.

Large sheets of paper and pencil.

Metre (yard) stick (optional).

☐ Make patterns for the back, front, pocket, sleeve and sleeve facing using the graph pattern given overleaf.

Note: if you wish to lengthen the pattern, lay the patterns for the back, front and sleeve on another sheet of paper. Cut along the lines indicated for lengthening (see graph), open out the patterns by the extra length required and re-draw outline. Cut out new pattern for back, front and sleeve.

☐ Make the pattern for the appliqué monster using the graph pattern given. No seam allowances are necessary, since the monster is to be applied by machine, using a zigzag stitch which entirely covers the raw edges. (If the appliqué is to be worked by hand, however, add 1.5cm (⅝") seam allowance all round, since the applied shape will need to be hemmed to prevent fraying.)

The dressing-gown

You will need:

1.5m (1⅝yd) of 126cm (50") wide acrylic fibre such as Acrilan fleece. To calculate fabric requirements if using fabric of a different width, work out a cutting layout (see Sewing chapter 8, page 684).

20cm (8") by 30cm (12") of matching cotton fabric for pockets.

Matching thread.

Contrasting tacking thread.

80cm (⅞yd) of 180cm (70") wide acrylic fabric with a shiny surface on one side such as Neospun jersey.

Piece of iron-on non-woven bonded interfacing, such as Vilene, 66cm (26") square.

Ballpoint pen.

Black thread for working appliqué.

Piece of plastic foam sheeting 66cm (26") square and about 5mm (⅜") thick.

Glass bead for monster's eye.

Cutting out

☐ Position pattern pieces for back, front and sleeves on the fleece as shown on the cutting layout (overleaf), or following your own cutting layout for fabric of different width and cut out.

☐ For the tie belt, cut out two strips of fleece each 14cm (5½") wide by 40cm (16") long (including seam allowances) as shown on cutting layout.

☐ Cut out four pocket pieces in matching cotton fabric.

Treat the wrong side of the jersey fabric as the right side throughout for the shiny reptilian effect.

☐ Cut out two sleeve facings in jersey fabric.

☐ Also cut long strips of jersey on the bias 4cm (1½") wide to make a total length of 2m (2yd).

☐ Cut out a piece of jersey fabric 66cm (26") square for the appliqué monster.

The monster

☐ Iron the piece of interfacing on to the right side of the square of jersey fabric. (Remember that it is the wrong side of the fabric which will be exposed.)

☐ Trace round the monster pattern on the interfaced side of the jersey using a ballpoint pen.

☐ Cut out the monster shape.

☐ Also cut out the eye socket below the eyelid.

☐ Mark all the body details of the monster as illustrated—dorsal fin, limbs, tail and eyelid—with tacking thread on the shiny side of the jersey fabric.

☐ Work close zigzag stitching all round the outline of the monster, using black thread.

☐ Trim off excess threads and scraps of interfacing.

☐ Place the monster shape, right side up, on the square of plastic foam sheeting and pin.

☐ Work zigzag stitch for all the body

Steve Bicknell

Detail of monster, showing the body markings 'drawn' with a zigzag stitch.

details slightly to one side of the tacked guidelines. It is advisable to avoid stitching over the tacking threads as they would otherwise be difficult to remove afterwards. Sheets of paper placed under the plastic foam sheeting will help the machine to run smoothly.

☐ Tear away the paper when the stitching is completed.

☐ Trim away the ends of thread, and cut away surplus foam sheeting so that it is about 5mm ($\frac{3}{16}$") smaller all round than the top layers of fabric.

☐ To apply the monster, position the motif centrally on the right side of the back piece of the dressing-gown. Pin in place.

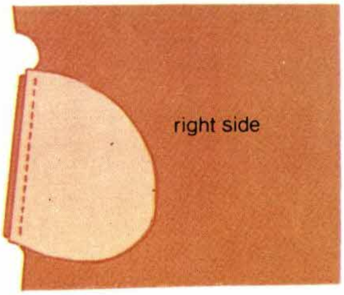
☐ Work zigzag stitch all round the outline of the monster and round the eye socket.

☐ Add details such as tongue and claws with zigzag stitch on the fleece. If you stitch slowly these can be 'drawn' with the machine needle without prior marking.

☐ Sew the bead eye in place by hand.

Making up

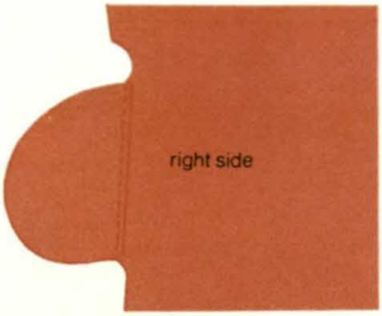
☐ With right sides facing, pin, tack and stitch each pocket piece to the pocket openings of back and front sections (fig.1).



Coral Mula

1. *Pocket piece stitched to opening.*

☐ Fold pocket flaps away from dressing-gown fabric and topstitch in place parallel to seam (fig.2).



2. *Turn pocket over and stitch down.*

☐ Run a line of straight machine stitching round the curved neck edges on back and front sections to prevent stretching.

☐ With right sides facing, join shoulder seams. Press seams open. (It is a good idea to place the seams over a towel when pressing them—this avoids crushing the fabric.)

☐ Join bias strips of jersey fabric to make up the total length required and bind front and neck edges, remembering to treat the wrong side of the fabric as the right side. Finish the inside edges with slip-stitching. (For applying binding see Sewing chapter 10, page 822.)

☐ With right sides facing, fold each belt piece in half lengthwise and stitch along long edge and one end.

☐ Turn right side out and press.

☐ With right sides facing and belts lying towards the centre front, and with raw edges level, tack the belts to the front sections in positions marked on pattern.

☐ Place shiny side of each jersey facing to right side of each sleeve, and stitch along cuff edge.

☐ Neaten raw edges of facings. Turn to wrong side and press.

☐ With right sides facing and garment opened out flat, stitch sleeves to armhole edges and press seams.

☐ Fold the garment in two along shoulder seams with right sides facing and pin inner arm and side seams.

☐ Stitch up from cuff to armhole and then down to hem, omitting pocket opening.

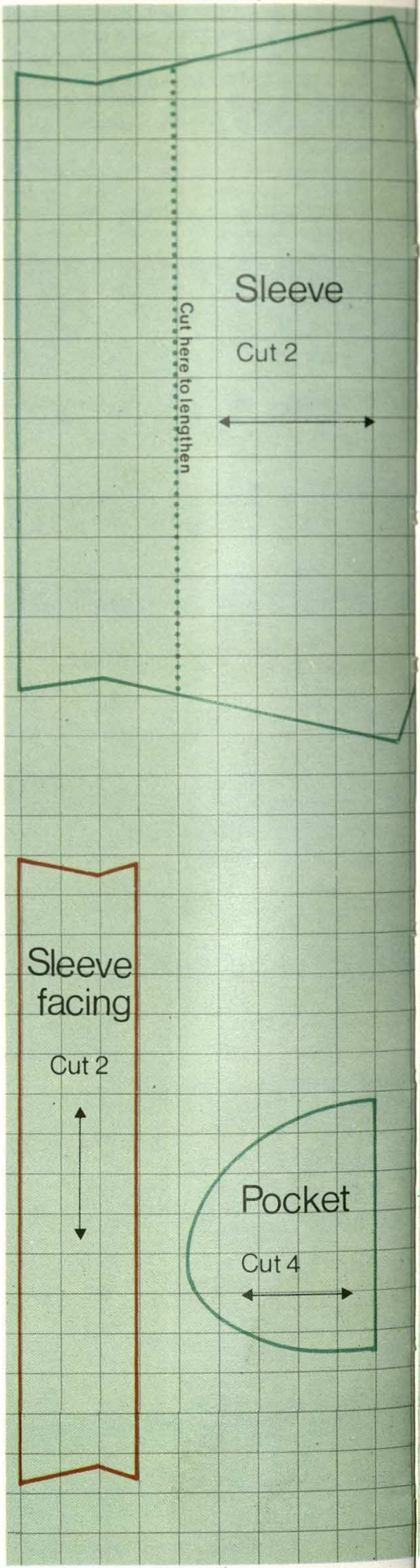
☐ Repeat on other side and press seams.

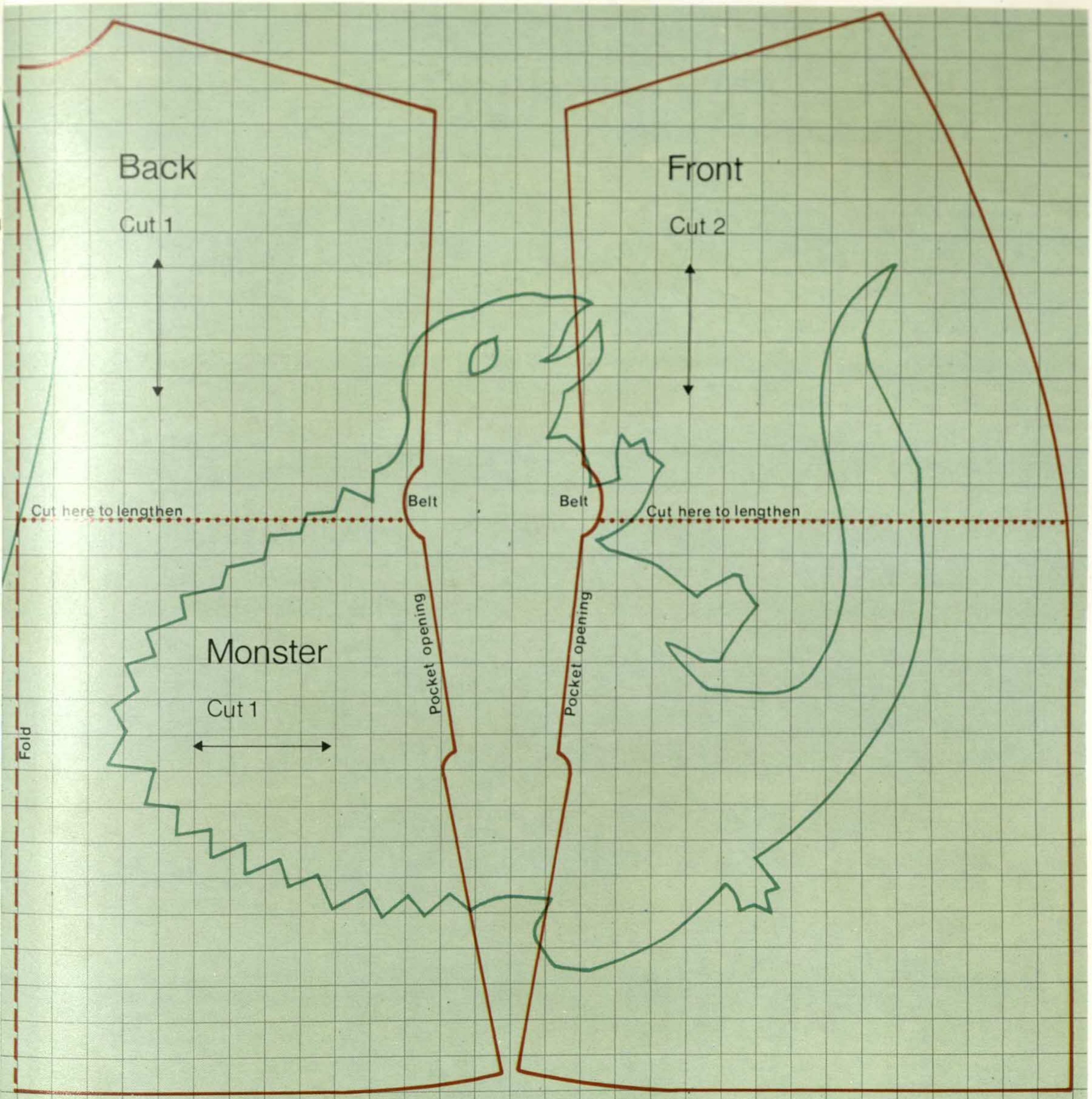
☐ Working on the wrong side of garment, stitch the pocket pieces together with a double line of stitching for extra strength.

☐ Neaten hem edge. Turn up and sew hem.

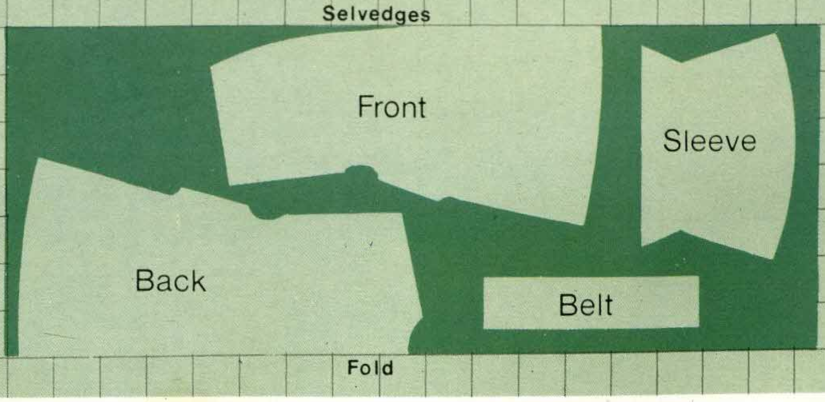
☐ Catch stitch sleeve facings to sleeve.

☐ Turn finished garment right side out.





Each square=2·5cm(1") sq

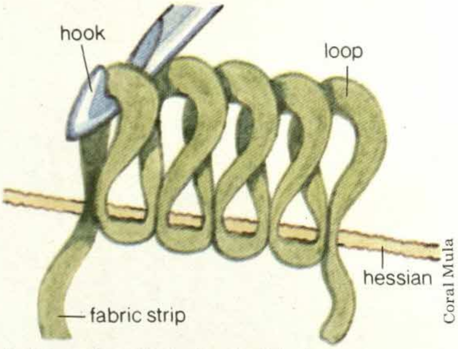


Suggested cutting layout for 126cm (50") wide fabric

Trevor Lawrence

Hooked rugs from rags

Hooked rugs are made by holding a strip of fabric against the underside of a piece of hessian and pulling the strip through to the right side of the hessian in loops to form a pile (fig.1). This type of rug was first made in America in the early 19th century on coarse linen and sacking, and the craft became more popular among country people when hessian became the common material for sacking and provision bags. (The animal motifs printed on the sacks as trade marks were often included in the design.)



Coral Mula

1. *How the pile is hooked in loops.*

Transworld

In Britain hooked rugs appeared in the mid 19th century when homespun fabrics were being superseded by cheap, commercially produced cloths. When garments made from these wore out, much of the material in them could be re-cycled in a rug. (York has a tradition of making scarlet rugs, made from military uniforms, for example.)

Many rugs were designed to celebrate special occasions such as jubilees, birthdays, sporting events, weddings and their dates: pictures of folk heroes were also common.

Materials and equipment

Rags of all kinds can be used to make a rug although it is best to use one type of fabric within a specific rug if it is to be used as a floor covering. For wall hangings, however, different types of fabric may be combined. You should allow about 50gm (2oz) mixed fabrics per 12cm (5″) square.

Old nylon tights and stockings and yarn unravelled from knitted garments may also be used for hooked rugs.

Hessian sacks for the foundation are rarely obtainable these days but hessian is available in various widths by the metre (yard) from craft and furnishing shops. Choose the width to fit your rug frame and buy a piece 10cm (4″) longer and wider than the desired size of the rug.

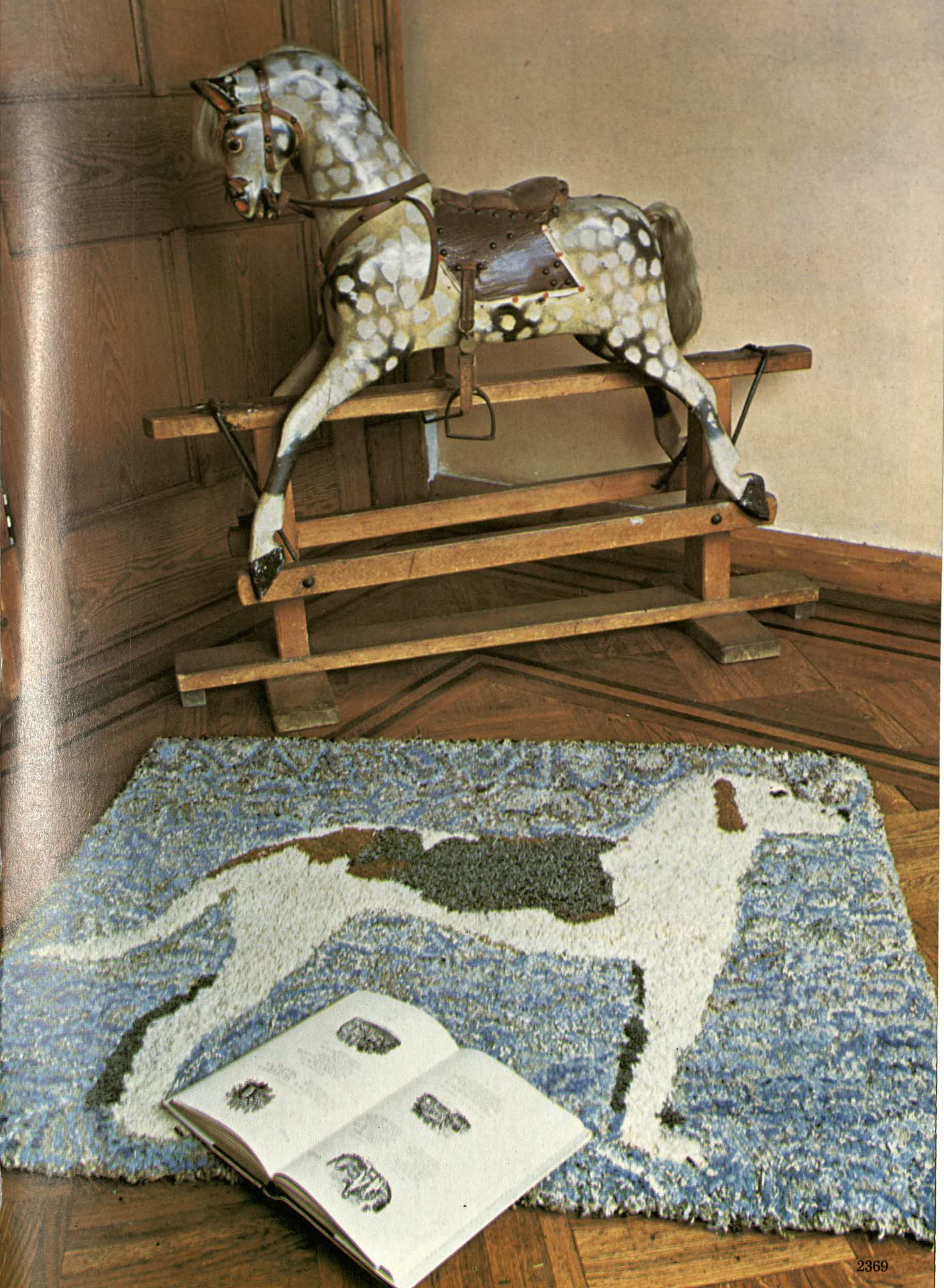
If you are making the rug as a floor covering, it is advisable to back it with a second piece of hessian of the same size to give extra strength.

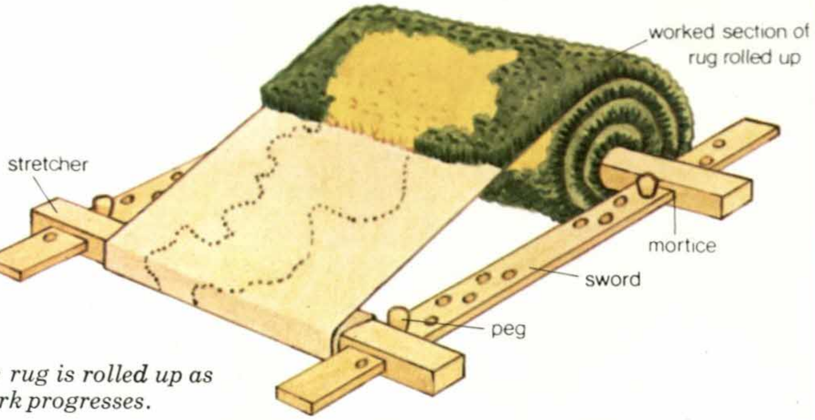
Rug frame. The hessian must be stretched over a frame so that the strips can be hooked through easily. Although the rug can be longer than the frame (the excess length is wound round the stretchers), it cannot be wider than the frame, unless you make it in sections. You can make a rug of the same width as the frame providing you turn under the raw edges before mounting the hessian on the frame. If you have a large needlepoint frame with rollers you could use this or you could buy a special frame.

The top and bottom sections (the stretchers) of these frames are morticed at each end and have strips of webbing fitted along the section in between. The ends of the hessian are sewn on to the webbing so that when the 'swords' or side pieces are pushed into the mortises and wooden pegs are pushed through holes in the swords, the hessian is held taut. The hessian

Left: narrow strips of tweed form the close looped pile of this hooked rug.

Right: subtle shading of the fabrics contributes to the beauty of this hooked rug designed by Denis Barker.

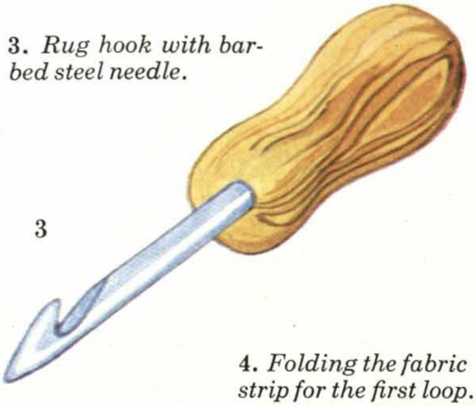


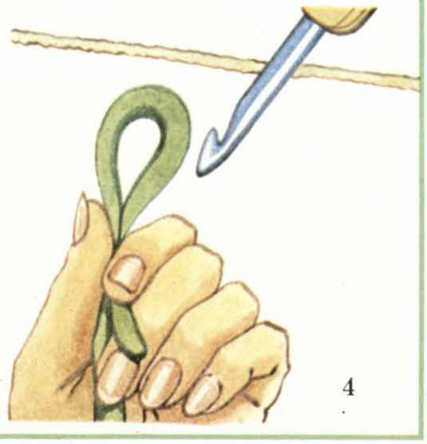


2. *The rug is rolled up as the work progresses.*

Coral Mula

3. *Rug hook with barbed steel needle.*





4. *Folding the fabric strip for the first loop.*

may be rolled up over the top and bottom pieces of the frame as the work progresses (fig.2).

Rug hooks are barbed steel needles fitted with handles (fig.3). The barbs are designed to make holes in the hessian through which the fabric strips can be pulled. Hooks for use with wide strips of 2.5cm (1″) and more should be made from heavier metal so that the initial hole is larger and the fabric can be hooked through it without difficulty.

Preparing the strips

Rags. Cut the strips on the straight grain as long as possible from the available fabric. Do not cut the strips on the bias—they tend to disintegrate when pulled through the hessian.

For a neat, tightly hooked floor rug cut the strips 1.2cm (½″) wide if you are using medium-weight fabrics. If you are combining fabrics of different weight, cut those from the lighter weights wider and fold them to provide the same width and bulk as the heavier weights.

Tights and stockings. These can be cut into strips or, for a heavier effect, sheer tights and stockings can be used as they are (but with the feet and body sections removed).

Unravelled yarn. Several strands should be held together to make the same thickness as a fabric strip 1.2cm (½″) wide.

Designing

Hooked rugs can be effective when made in a randon mixture of colours and patterned fabrics or you could work them in a simple geometric or pictorial design.

More ambitious designs can be drawn straight on to the hessian in chalk or felt-tipped pen.

Often the types of fabric available may inspire a design. White or cream bouclé wool, for example, could be used for a poodle or polar bear or even a snow scene; yellow might suggest the sun, moon or an animal such as a lion or cockerel.

You will often find that multi-coloured fabrics—such as tweeds—make livelier designs than plain flat colours.

Pile length. Choose your pile length to suit the type of design and the type of wear to which the rug will be put. Designs with elaborate detail and subtle modulated colour should be worked with small loops of about 1.2cm (½″) long. These are less hard wearing and should be kept for wall hangings. Random geometric designs can be worked with longer pile from 2.5cm (1″) long for a pebble or mosaic effect to about 10cm (4″) long for a luxurious finish.

Making a rug

You will need:

Hessian 10cm (4″) larger all round than the desired finished size of rug, plus a second piece of the same size if you are backing the rug.

Prepared rags.

Hook.

Frame.

Sacking needle and carpet thread.

☐ Turn under and tack down the edges of the hessian or leave them until the hooking is complete and turn them under then.

☐ Mount the hessian on to the frame by stitching the ends to the webbing.

Finished lobster rug, being worked opposite. Design by Denis Barker.

Steve Bicknell

Steve Bicknell

Wind any surplus length on to one of the stretchers, insert the swords into the mortises and put in the pegs so that the hessian is held taut.

Lay the frame horizontally for hooking the rags. If it is supported across two tables or a table and chair it is possible for two or more people to work together on the rug.

The hooking. The design may be worked in horizontal rows across the hessian or you could work the main motifs first and then fill in the background.

☐ Loop the end of the first strip over for about 2.5cm (1″) and hold the loop below the hessian in the required position. With your free hand push the hook through the hessian from above (fig.4) and insert the hook into the loop. Pull it back through the hessian and draw up the loop to the desired length.

☐ Still holding the fabric strip under the hessian, make another loop, push the hook through in the required position—about 5-10mm ($\frac{1}{4}$″-$\frac{3}{8}$″) away—and repeat the process (see fig.1).

☐ Continue in this way using strips of appropriate colours for your design. Leave the ends of strips on the underside to be trimmed later to about 1.5cm ($\frac{1}{2}$″). If you intend to cut the loops on the right side, the ends may be pulled through.

☐ Remove the rug from the frame. Turn under the raw edges if you have left them until now, and hem in place.

Backing the rug. Fold under the turnings on the backing piece and place it on the wrong side of the rug. Pin and hem firmly with the carpet thread and sacking needle.

Hooking the last loops in the border of the lobster rug. The hessian was mounted on a needlepoint floor frame.

Quilting. For extra strength it is advisable to quilt the backing to the rug. This has the added advantage of holding the backing firmly in place when the rug is washed and hung on a line.

☐ Pass the needle from the back of the rug to the front, make a tiny stitch in the hessian (which will be hidden by the loops) and pass the needle to the back again. Tie the threads ends in a firm knot and cut off.

☐ Repeat at 15cm (6″) intervals over the whole surface.

More intaglio techniques

Over the years many methods of incising metal plates for intaglio printing have developed. Some have been used continuously since their inception, others have long since died or been superceded by similar or more efficient techniques.

Probably the simplest form of intaglio is dry-point. This involves scratching a line on a metal plate. The result is usually a clearly defined line drawing. In contrast to this are mezzotint, another mechanical technique and aquatint, a form of etching. Both produce a plate which give tonal effects when printed.

Dry-point

The simplest way to make an incision on a printing plate is to scratch it with a sharp needle. When ink is rubbed into this scratch and the plate and paper run together through a press the ink will be transferred from the scratch to the paper. The deeper the scratch, the darker the line will be.

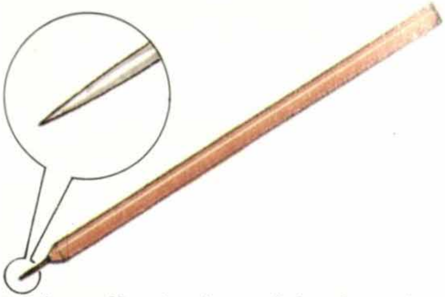
Build up a design with more and more scratches. The result when printed is called dry-point, and is easily distinguishable as such.

Both Rembrandt and Matisse used dry-point to good effect. Instead of making scratches with a needle they would often use diamond, sapphire or ruby points to scratch the copper or zinc plate.

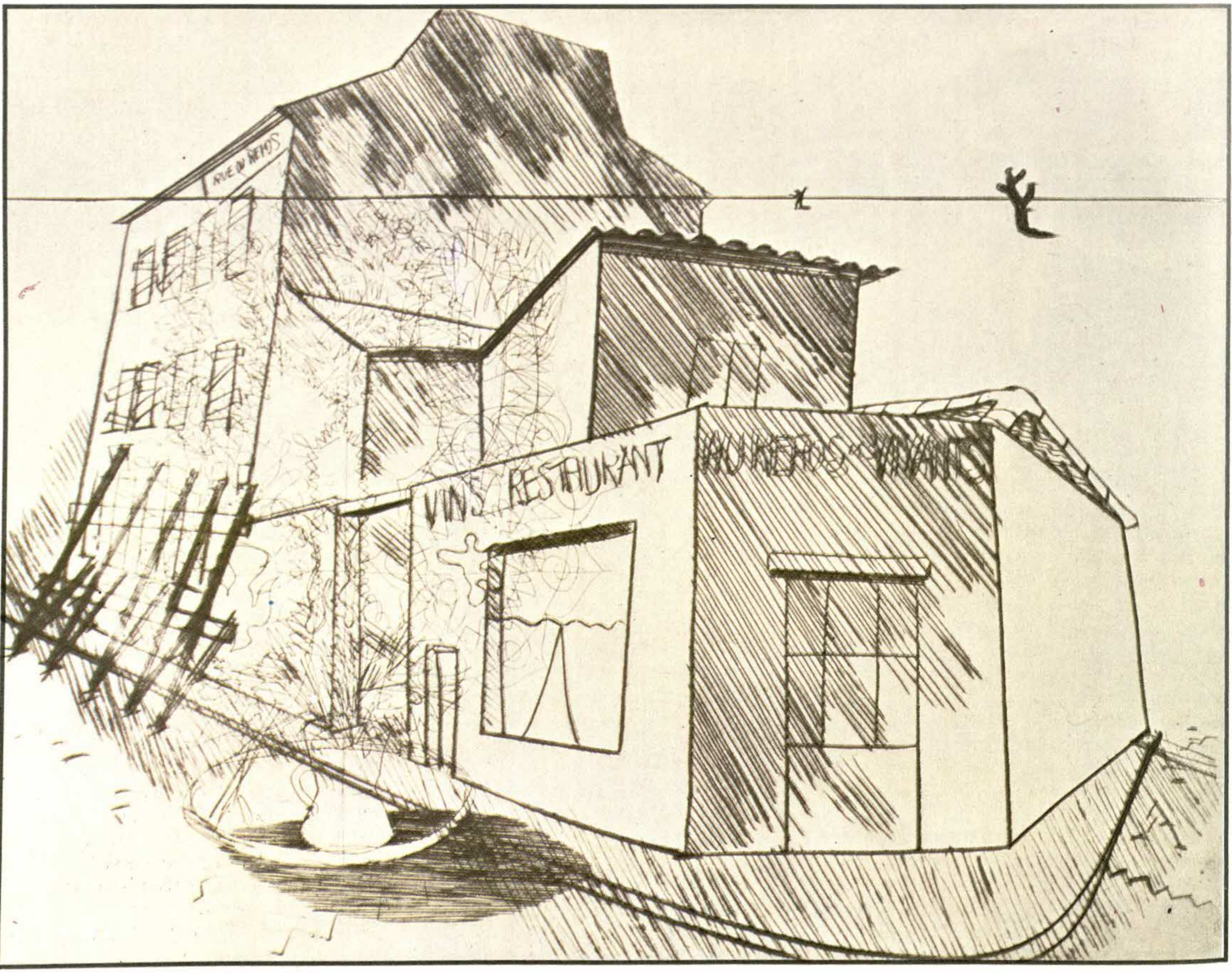
Materials

Unlike some methods of making intaglio plates the actual equipment needed for dry-point is not extensive.

A needlepoint embedded in a wooden handle (available at art supply shops) is the most essential item (fig.1). The needlepoint should always be kept sharp. A needlepoint can be made by using an old-fashioned metal gramo-



1. *A needlepoint is used for dry-point.*



Jerry Tubby /By kind permission of the Trustees of the British Museum phone needle fixed into a wooden handle, though this is not long-lasting as it is impossible to sharpen.

A carborundum stone is essential to sharpen the fixed needlepoint whereas the gramophone needle can be thrown away and replaced by a new one.

When sharpening, the needle should be revolved between two hands while the point lies on the carborundum stone.

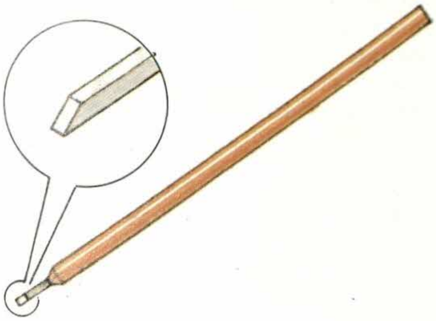
A roulette is another instrument which can be used to make marks on a metal plate and can be bought from art supply shops. It is a spiky wheel (fig.2) and when run across a plate leaves a series of dots.

Paul Williams

2. *A roulette gives a stippled effect.*

Coarse sandpaper when layed on the plate and run through a press will produce sufficient indentation in the plate to hold ink and when printed will give a light stippled effect.

Printing plate. A copper plate is preferable to zinc for dry-point as it is harder and will give many more prints. The copper plate can be purchased cut to suitable sizes from art supply shops. An acrylic block about 2mm ($\frac{1}{16}''$) thick, though frowned on by purists, makes a good printing plate for the beginner. Not only is it cheaper than copper, it is also much easier to scratch.



3. *Burr is removed with a scraper.*

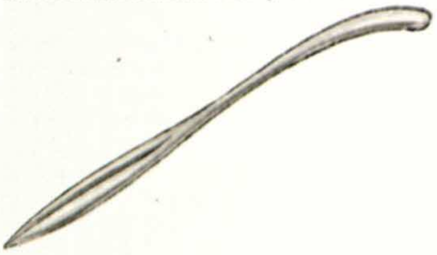
A scraper (fig.3) is essential for any corrections. It can be bought from hardware or art supply shops. The sharp edge will scrape off any metal that has been raised from the surface of the plate and once the area has been burnished or polished smooth, will be ready for you to begin scratching again.

Dry-point engraving gives simplicity to this scene from Stanley Hayter's series—'Paysages Urbains'.

Steve Bicknell

A dry-point engraving is produced by scratching on a metal printing plate.

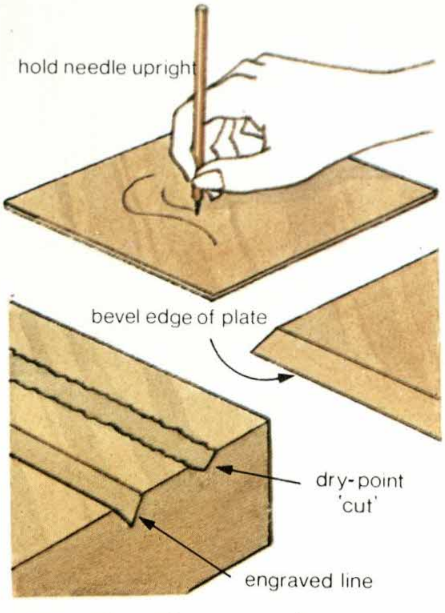
A burnisher (available at art supply shops) is needed to burnish the surface (fig.4). It should be used in much the same fashion as an emery board.



4. *The burnisher smoothes the surface.*

Effects

By scratching or by using the roulette a roughness is thrown up on the surface of the plate which will print either weakly or strongly, according to the amount of ink it holds. This roughness on the surface (the burr) is the main characteristic of dry-point (fig.5). The burr can be compared with the effect of a farmer ploughing furrows in a field.



5. *Scratching throws up a burr.*

By varying the pressure of the needle on the surface of the plate different effects can be created.

A thick heavy line is produced by exerting reasonable pressure.

A thin light line is produced by gently scratching the surface of the plate.

A heavy, stippled spotted effect is created by using the roulette.

A lightly stippled result will be obtained by placing coarse sandpaper on the printing plate and putting it through the press.

Mistakes are easily made, particularly when working on copper.

If the point of the needle is not sharp enough it will stick in the metal or, alternatively, slip in the wrong direction.

Once the mistake has been made it can be remedied by flattening the burr with a burnisher—use a smooth back and forth see-saw motion for this. Alternatively, a scraper can be used to remove the burr entirely.

Once the burr has been completely removed, the plate should be thoroughly polished with metal polish and then re-scratching can begin.

The design

If the design or picture is not being drawn directly on to the plate freehand, a tracing can be made.

Select the design or picture, place a sheet of tracing paper over it and, using a hard pencil, trace the design. Then turn over the tracing paper and rub it over with a soft pencil.

The tracing paper should then be placed right side up on the printing plate. The design or picture should be re-traced and it will appear on the printing plate.

Mezzotint

This is a method of working from black to white—in French it is known as '*manière noire*'.

Mezzotint is the reverse of engraving. The mezzotint rocker (fig.6) creates thousands of small dots, each with a burr surrounding it. By scraping, burnishing or polishing the burr in specified areas a design is produced. By removing various amounts of the burr different tones of grey are produced. The more burr removed, the less ink the burr will hold thus a lighter tone is produced. If no burr is removed sufficient ink will be held to print black. Thus the tonal effect is created.

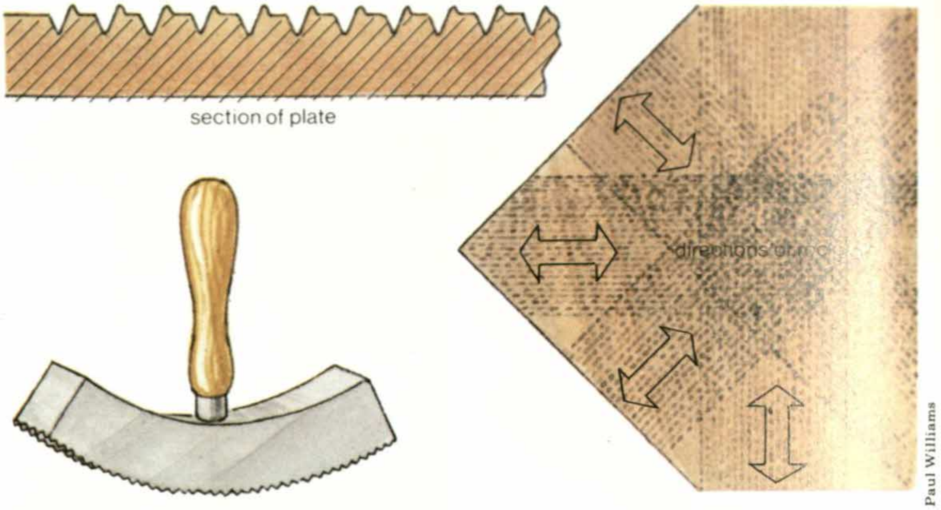
There can be no specific instructions to create different effects. These depend largely on the artist, the pressure he exerts when using the rocker initially and also his burnishing technique. Every artist will create his own mezzotint style.

The main characteristic of mezzotint is its dark velvety background and overall texture.

It is a technique invented in the 17th century and perfected in the 18th, but by the end of the 19th century it had become unfashionable and fallen out of use. So the modern artist has had to recreate the technique.

Mezzotint is often used on an engraving to give a solid tonal effect and for shading. Unlike engraving and dry-point mezzotint is not a linear technique. One of mezzotint's most usual applications is for shading large areas such as the sky.

A pure white cannot be produced. The tones range from a pale grey to black.



Paul Williams

6. *The mezzotint rocker is used to cover the plate with hundreds of dots.*

Preparing the plate

A copper plate is most commonly used, though mezzotint is occasionally worked on zinc.

The preparation of the mezzotint plate is very laborious as the whole plate has to be covered with hundreds of dry-point dots and stipples and can take at least a day depending on the size of the plate. The preparation is accomplished with the use of a mezzotint rocker (see fig.6). This is a small curved piece of metal, one side of which is serrated and the smooth side attached to a handle and can be purchased from art supply shops. The rocker is rocked over the plate in every possible direction. If the plate were printed at this stage a solid even black should cover the paper.

To create a design

This is rather similar to correcting mistakes on dry-point and engraved plates.

You will need:

A prepared metal plate (covered with stipples—if printed, a solid even black will cover the paper).

A scraper (available from hardware or art supply shops).

A burnisher (available from art supply shops).

Metal polish such as Brasso.

Mistakes can easily be remedied by burnishing the plate to a smooth surface, polishing it with metal polish and once more preparing the plate with the rocker so that it will print solid black all over. Work can then start again.

Aquatint

This is a chemical etching process which produces a tonal rather than a linear result obtained by the actual etching process. The final result is somewhat similar to a wash drawing.

To obtain a wash or tint instead of a line an area of the plate must be covered with a part-resist which allows the acid to etch round each particle.

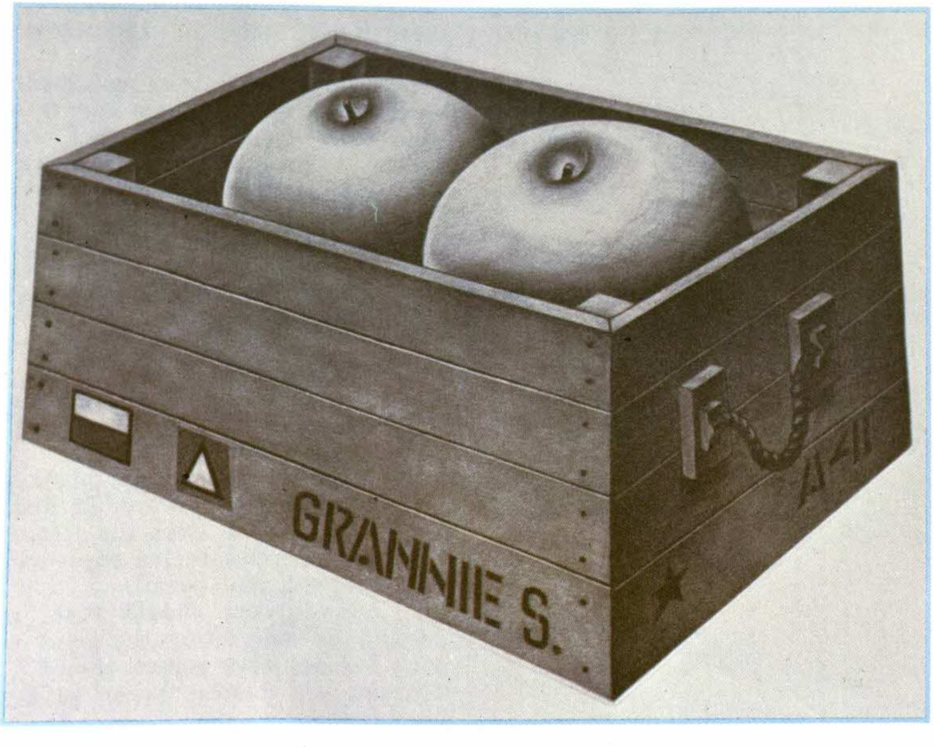
Aquatint is often used to add depth of tone to an etching and, like mezzotint, for large areas of tonal colour.

A familiarity with etching technique is an advantage when embarking on aquatint (Printing chapter 22, page 2330).

Preparing the plate

Copper and zinc printing plates are generally used. Zinc is recommended for beginners to use as it is less expensive.

The plate should be prepared as for etching (Printing chapter 22, page 2330). Those areas of the plate which you do not wish to be etched should be covered with a hard ground to form the



Steve Bicknell

Two apples in a box, this mezzotint by R Kraguly shows a range of grey tones.

resist or the resin as the part-resist (Printing chapter 22, page 2330).

You will need:

Rosin (a powdered waxy substance which can be bought at art supply shops).

A dust box (available at art supply shops; it is possible to improvise using an old trunk or tea-chest or alternatively a large square of muslin).

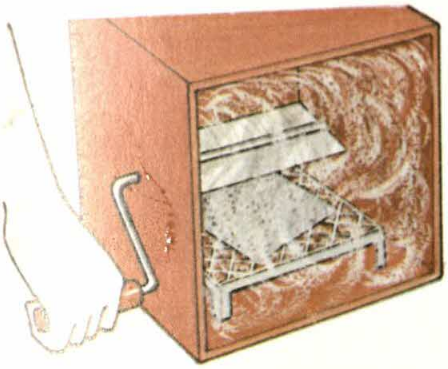
A wire tray.

Gas ring or Bunsen burner.

Zinc or copper plate.

Using a dust box put two handfuls of rosin inside it. Place the plate on a wire tray in the box.

Blow the rosin over the plate using a fan (fig.7) which is part of the box.



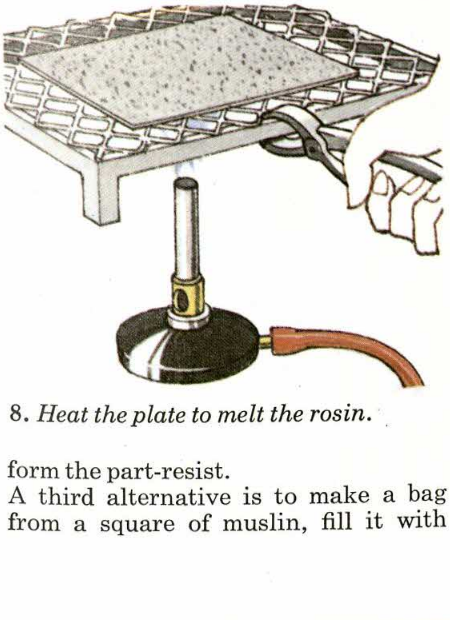
7. *Blowing rosin in a dust box.*

Using an improvised dust box—a trunk or tea-chest, it is important to make sure that all the lining has been removed and that it closes easily.

Put into it a few handfuls of rosin powder. Bump the trunk or tea-chest around in all directions, open the lid and insert the plate on a wire tray.

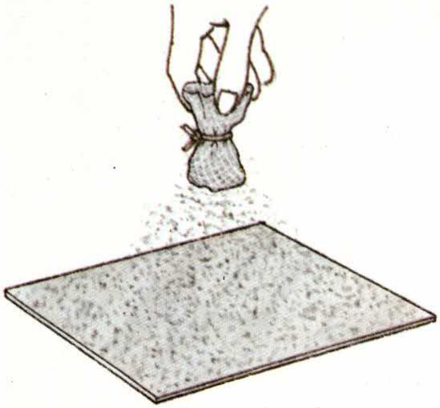
Leave the plate in the improvised dust box for about 10 minutes for the rosin to settle on the plate.

Remove the plate and wire tray from the dust box then heat it on the wire tray over a gas ring or Bunsen burner (fig.8). The rosin flakes will melt and form the part-resist.

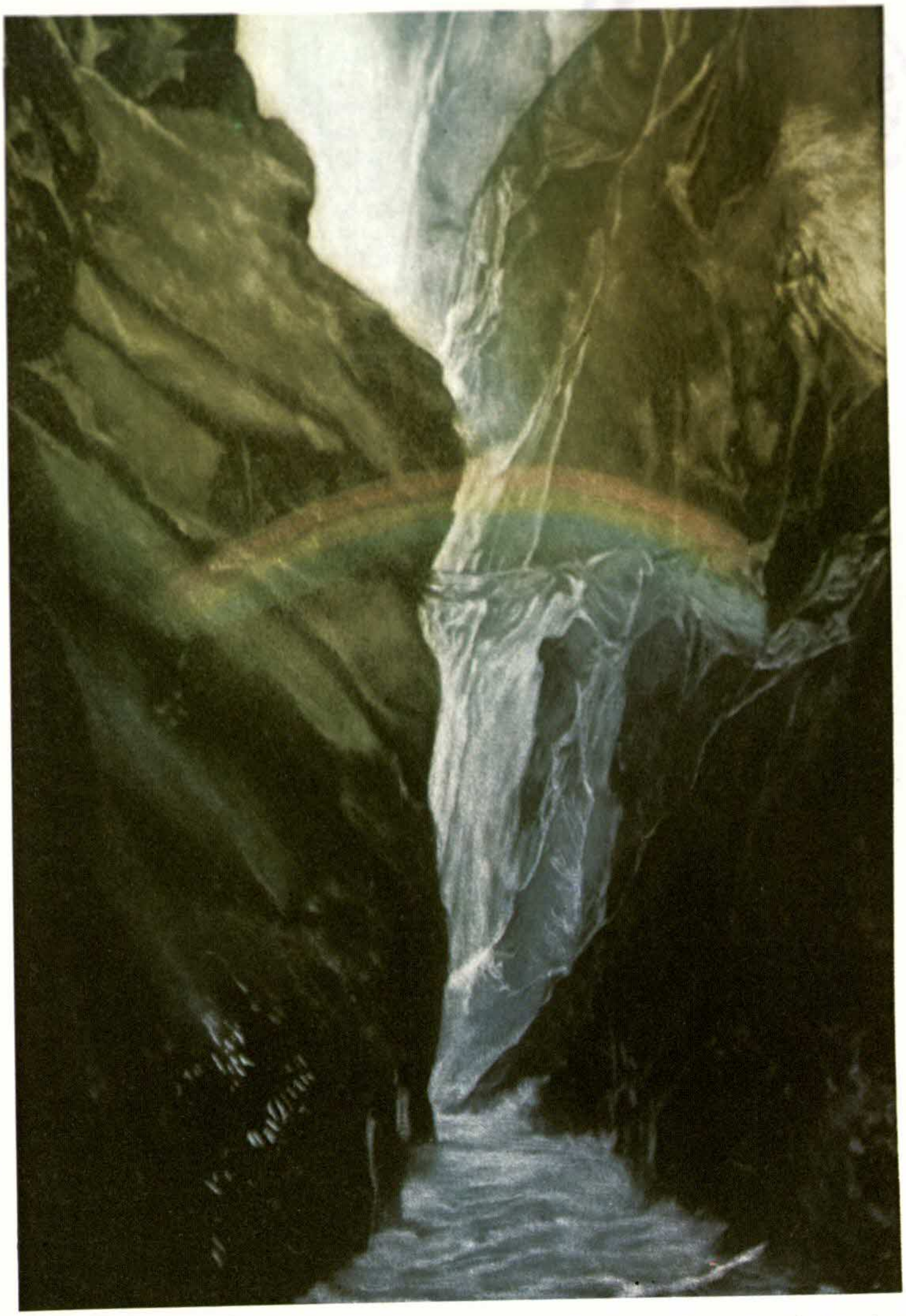


8. *Heat the plate to melt the rosin.*

A third alternative is to make a bag from a square of muslin, fill it with rosin and shake over the plate (fig.9). Treat the plate exactly as if you were using a dust box.



9. *Fill a muslin bag with rosin.*



It is possible to print mezzotints using coloured inks. This one by Susan E. Jameson is called Air Force II.

Etching the plate

The plate should be inserted in acid exactly as for etching (Printing chapter 22, page 2330). This will attack the unprotected area around each particle.

To obtain different effects the beginner should spend plenty of time experimenting. Vary the length of time the plate is left in the dust box or vary the length of time the plate is being bitten in the acid.

Alternatively, the number of coats of part-resist can be varied.

Prepare the aquatint plate for inking in exactly the same way as an etching plate.

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Designs with twill weaves

Yarn — weaving 28

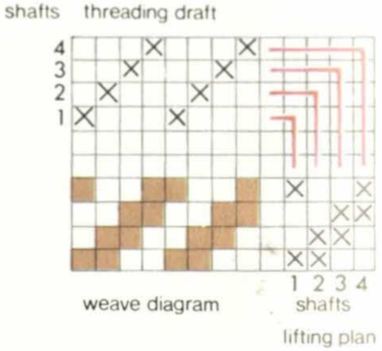
The name 'twill' refers to a very commonly used group of weaves which comes second to plain weave as the most frequently found type of cloth construction. The appearance of all twill weaves is characterized by the series of diagonal lines which cross the fabric. Often these lines are not discernible unless the fabric is scrutinized closely.

In plain weave the weft interlaces with each separate warp thread, but in a twill weave the weft goes over and under two or more warp threads at a time thus creating floats. By interlacing the weft thread one warp thread along past the interlacement of the previous pick, a continuous diagonal line is produced.

Because there are fewer interlacements, this type of construction enables the yarns to be closed up more effectively to make a compact but supple fabric.

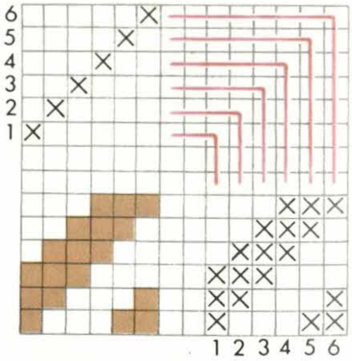
Basic twills

Of all the different twill weaves, the one known as 2 and 2 is probably used more than any other—2 and 2 refers to the ratio of warp to weft threads on the face of the cloth (fig.1). There are two warp threads to every two weft threads and this is called a balanced twill.



1. *Draft for the popular 2/2 twill.*

3 and 3 (fig.2) and 4 and 4 are also balanced twills as they have an equal amount of warp and weft on the surface.



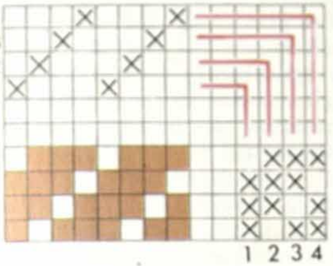
2. *Draft for the 3/3 balanced twill.*

Coral Mula

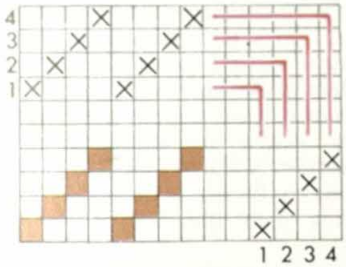
(To weave a 2 and 2 twill on this straight draft, weave one pick with shafts 1 and 2 lifted, one pick with shafts 2 and 3 lifted, one pick with shafts 3 and 4 lifted and one pick with

Steve Bicknell

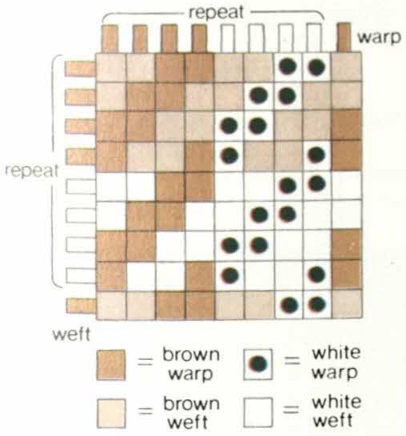
This bag is woven using a 2/2 twill weave with stripes in both warp and weft to create the plaid effect. Designed by Rita James.



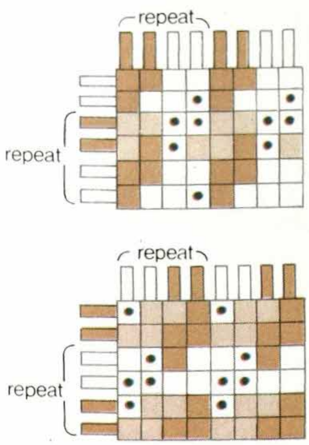
3. *Draft for the 3/1 warp twill.*



4. *Draft for the 1/3 weft twill.*



5. *The dog's-tooth uses 2/2 twill.*



6. *Guards check vertical and horizontal.*

shafts 4 and 1 lifted. See Weaving chapter 27, page 2302 for instructions on how to read weaving drafts.)

Warp twills. When there is more warp than weft showing on the face of the cloth the type of weave is called a warp twill. Denim is an example of such weave with a ratio of warp to weft of 3 to 1 (fig.3).

If you examine denim you will notice how different the underside looks. This is because a different coloured weft is used and only the warp colour is dominant on the surface of the fabric. The pale weft colour naturally dominates the wrong side.

Weft twills. When the weft predominates in a fabric, for example in a 1 and 3 twill, the weave is called a weft twill (fig.4).

All these weaves are continuous twills in which the diagonal ridges run in an unbroken line up the cloth. The angle of the diagonal is determined by the number of threads to each 2.5cm (1") in both warp and weft. If there is an equal number of ends and picks, the angle of the diagonal is 45°. If there are more ends than picks the diagonal is steeper, and shallower if there are fewer ends than picks.

Pattern twills

Using a four-shaft loom you will be able to weave three different twills: 2/2, 3/1 and 1/3. Try them out separately or incorporate bands of different construction as you proceed along the warp. Depending on your choice of colour in both warp and weft you will find it possible to create a variety of patterns although the basic weave construction is still the same.

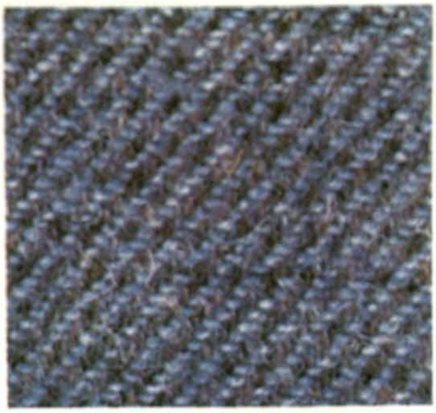
Scotch tartans and many of the traditional checked fabrics which are associated with fine worsted suitings and chunkier tweed coatings are woven on a 2/2 construction.

The dog's-tooth or hound's-tooth pattern is a very common example of a colour and weave effect check. The true dog's-tooth is a twill weave. The order of colour in both warp and weft is four dark threads, four light threads etc and the weave is a 2/2 twill (fig.5).

Guards check is another popular twill colour and weave pattern. If a two dark threads, two light threads colour order is used in both warp and weft on a 2/2 twill weave a vertical or horizontal line is produced. This is called a Guards check (fig.6).

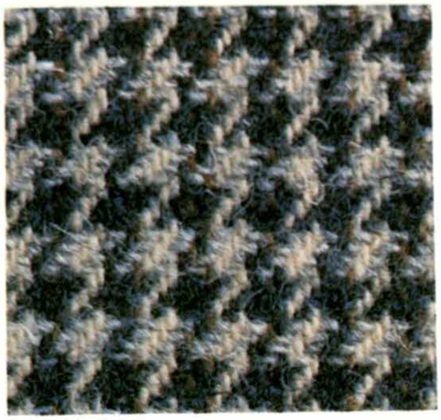
Prince of Wales check. This well-known design is a combination of areas of 4/4 colour dog's-tooth and 2/2 colour Guards check.

Apart from the straightforward diagonal twills there are many other interesting variations which can be made by alterations in the drafting or in the sequence of the lifting plan.

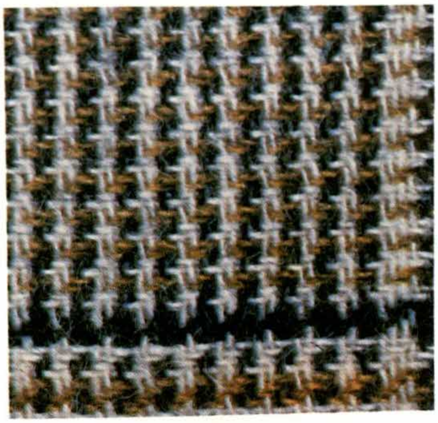


Details of a 2/2 twill in two colours.

Reverse of denim is a 1/3 weft twill.



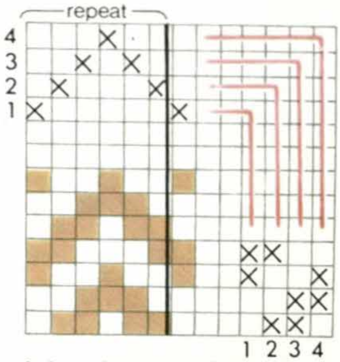
The popular dog's-tooth check.



Steve Bicknell

Detail of a Guards check weave.

A chevron or continuous zigzag pattern is one such variation. By drafting the warp in a 'V' formation a horizontal chevron will be produced whichever twill weave you decide to use (fig.7).

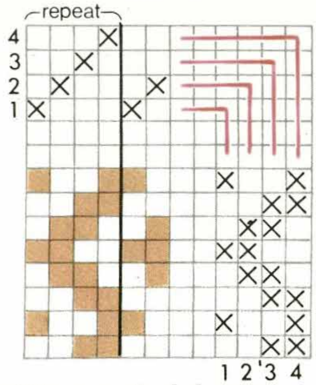


7. *Draft for a horizontal chevron.*

A horizontal chevron pattern.

By using a straight draft and reversing the lifting order every four picks a vertical chevron appears (fig.8).

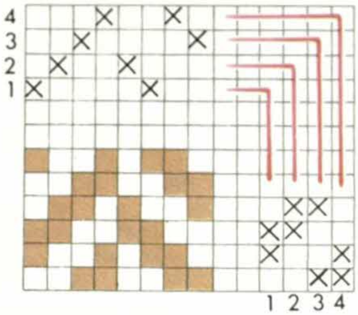
Another commonly known weave based on the twill is herring-bone.



8. *Draft for a vertical chevron.*

Detail of vertical chevron design.

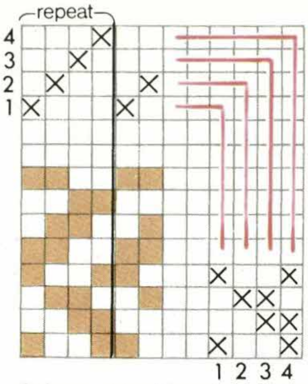
This comes in many weights and sizes and no doubt most people have had a garment in this particular fabric at one time or another. It differs from the chevron in that the zigzag is broken. For horizontal herring-bone (fig.9) the



9. *Draft for horizontal herring-bone.*

The well-known horizontal herringbone.

warp must be drafted in a certain order, while for vertical herring-bone the warp is threaded in a straight draft but the lifting plan provides the change in pattern (fig.10).



10. *Draft for vertical herring-bone.*

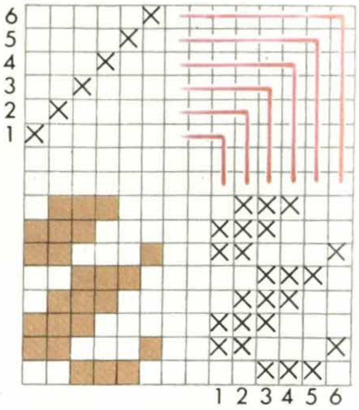
Sample showing vertical herring-bone.

Advanced twills

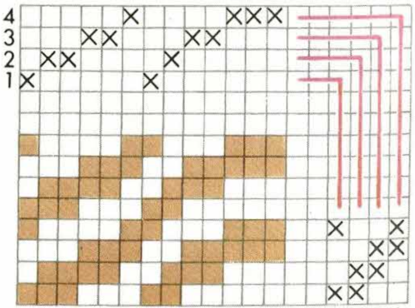
Examples of most of the weaves described previously can be found in most fabric stores but the handweaver has the opportunity to elaborate on the original theme in many different ways. Variations can be experimented with by the skilful use of colour and texture, and by ingenious modifications in the reeding, drafting and lifting plans.

Still using a four-shaft loom you could try distorting the straight twill diagonal into a curved line. This can be done by simply 'cramming and spacing' the warp during the raddle and reed threading stages. For example, instead of setting a warp at twenty ends per 2.5cm (1") throughout you could use a 10 dent reed and some sections could be sett at ten per 2.5cm (1"), some at 20 and some at 30.

Other variations on the basic twill weave require a loom with more than four shafts to make them really effective. A broken twill can be woven on six shafts and is worked on a special lifting plan (fig.11). Other ways of obtaining a distorted twill rely on either drafting the warp in such a way as to produce curving lines across the cloth (fig.12) or by using a straight



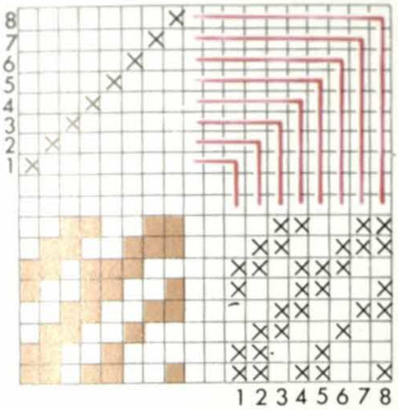
11. *A broken twill design needs a special lifting plan. This draft is for a pattern using six shafts.*



12. *Distorted twill for a curved line using only four shafts. This is produced by threading loom on a special draft.*

Coral Mula
Steve Bicknell

draft on a large number of shafts and then using a carefully worked-out lifting plan to give an original, distorted twill design. One example of this is shown in fig.13.



13. *A complex distorted twill design.*

The scarf

To begin with, it is best to concentrate on the simple twills. As the scarf shows, a four-shaft loom provides ample scope for many hundreds of simpler twill weaves. Colour, texture, tone and prportion are all important.

The scarf measures 183cm x 19cm (72″x 7½″) and uses a combination of 2/2 and 3/1 twills with plain weave.

You will need:

75gm (3oz) of purple Cheviot yarn with a count of 11 cut for the warp.

50gm (2oz) of yarn in mixed colours. The scarf shown uses 11 cut Cheviot in rose, light blue, dark blue, red and yellow with mohair loop yarn in pink and black.

Four-shaft loom with 9-dent reed.

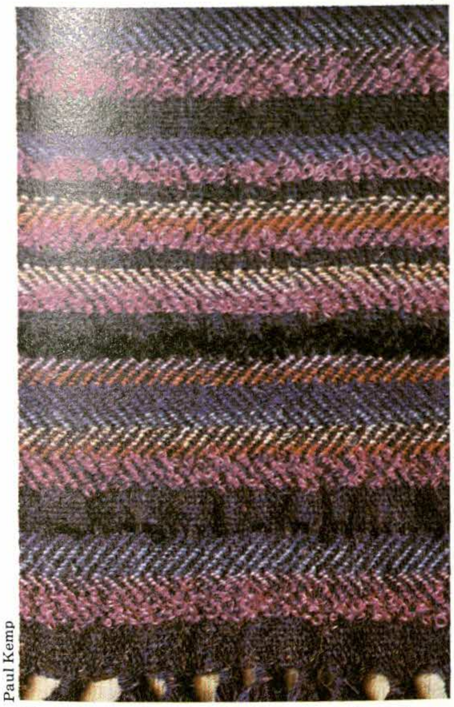
Warping equipment and weaving accessories.

☐ Make a warp in the purple yarn 270cm (3yd) long with 136 ends.

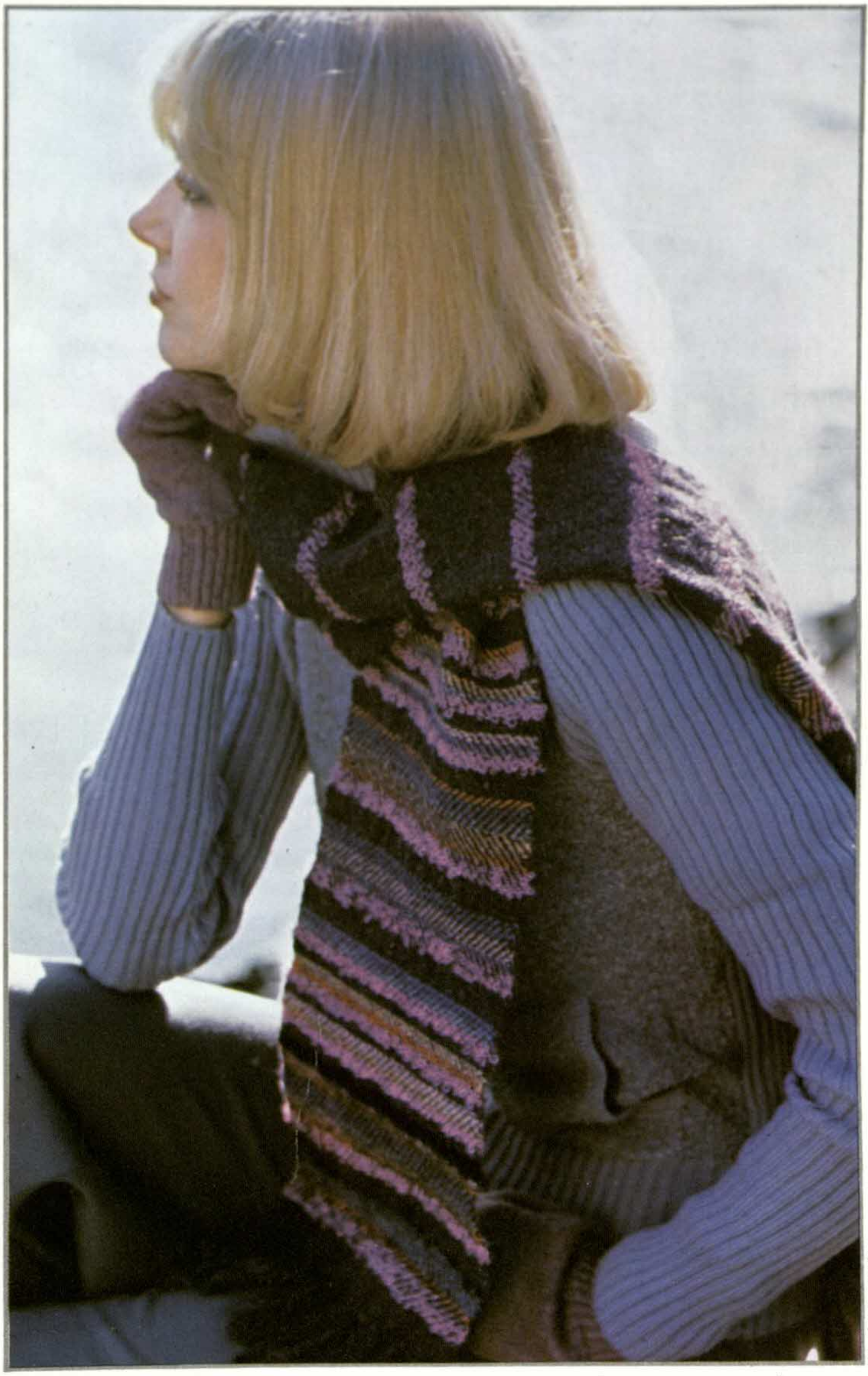
☐ The sett of the scarf is 18 ends per 2.5cm (1″) so thread two ends through each dent in the reed. You do not need to thread up selvedge threads.

☐ Follow the straight threading draft (see fig.1) and thread up your loom.

☐ Wind on enough yarn for a fringe before beginning to weave.


Paul Kemp

Detail of the scarf showing the clever use of twill with plain weave.


Sandra Lousada

Variety in colour, texture and weaves makes this simple scarf very effective. Designed by Rita James.

☐ Using all the different coloured yarns experiment with areas of 2/2 twill, 1/3 twill and plain weave. You can reverse the direction of the twill, make wide bands in one design or thin stripes. Vary the colour and texture of the yarns as well.

☐ Before cutting off the loom, make sure you leave enough yarn for the fringe the other end.

☐ Finish off the fringe by tying groups of threads in overhand knots.

Paper for craft work

Design know-how 81

This and the next chapter list the various types of paper available for craft work and what each type is suitable for.

Album board. This is a heavy board, not suitable for folding or creasing, but useful as a backing, possibly for collage.

Blotting paper. This is made from cotton rag or muslin. Apart from its obvious absorbent qualities, it has an interesting texture, comes in a wide variety of colours and is good for printing, especially litho.

Bristol board. This is a good quality board made from fine rag paper pressed together. It comes in a range of weights and will take paint very well.

Cardboard. An inexpensive board available in many colours. It will not crease or fold successfully and can really only be used flat. Its smooth surface means that it is suitable for poster colours, inks, magic markers, model making and abstract ornaments.

Cartridge paper. Basically a printing paper, but used extensively as a drawing paper. It comes in a variety of thicknesses and the colour ranges from white to pale buff. It is suitable for water-colour, ink sketching, charcoal, pencil and colour tinting, brass rubbing, pattern making and paper sculpture.

Cast coated paper and board. This is the highest grade of coated paper or board with a very smooth shiny surface which takes print well. The board is used for boxes and greetings cards. The paper has the same qualities but is finer.

Cobbs paper. This is a thin, high quality, dull coloured paper, designed as end papers in bookbinding.

Cover boards and papers. Paper weight will start at around 110-120 g/m² (grams per square metre) and extend through board weight to about 500 g/m². Both paper and boards come in a wide range of colours and finishes. The antique finish is the most popular, but it is also available in embossed finishes—some subtle such as sand grained and some more pronounced such as fabric or leather. Folds and creases well without cracking. Good printing qualities, preferably by litho or screen printing processes. An exciting surface for water-colour work. Can be used for lampshades but not flame resistant.

Crepe paper. A form of tissue paper. The crinkled effect is achieved by passing the paper through a patterned roller while still wet. It comes in a wide range of colours and is easily malleable but will stretch. This can be an advantage, in that it can be moulded—or a disadvantage because once it is stretched, it will never shrink back. Double crepe paper, which consists of two sheets of crepe paper bonded together, is particularly useful for flower making.

Detail paper. This is a translucent paper, cheaper and less stable than tracing paper. It is not very malleable and tends to crack. It is used in drawing offices for transferring designs. It is also recommended for brass rubbing.

Drawing papers and boards. These are made from pure rag fibres, and are particularly suitable for water-based paints. The boards have the same qualities as the paper but are more rigid, so that the finished picture is self mounted.

Duplex paper. Quite a stiff paper with a different colour on each side. Useful for such things as paper sculpture. It is made by rolling together two sheets of different colours while still wet, or coating one sheet with a different colour on each side.

Embossed paper. This is made by running paper through rollers which are engraved with a design. The harder the paper, the more apparent the pattern. They are available in a wide variety of designs, and qualities and can be used for textures in such things as collage, posters, paintings etc.

Fluorescent coated paper and board. This is easily foldable and generally used for posters and decorations.

Foil paper. This is coated with adhesive, dusted with powdered metals and then burnished to produce a metallic finish. Embossed foil papers are also available.

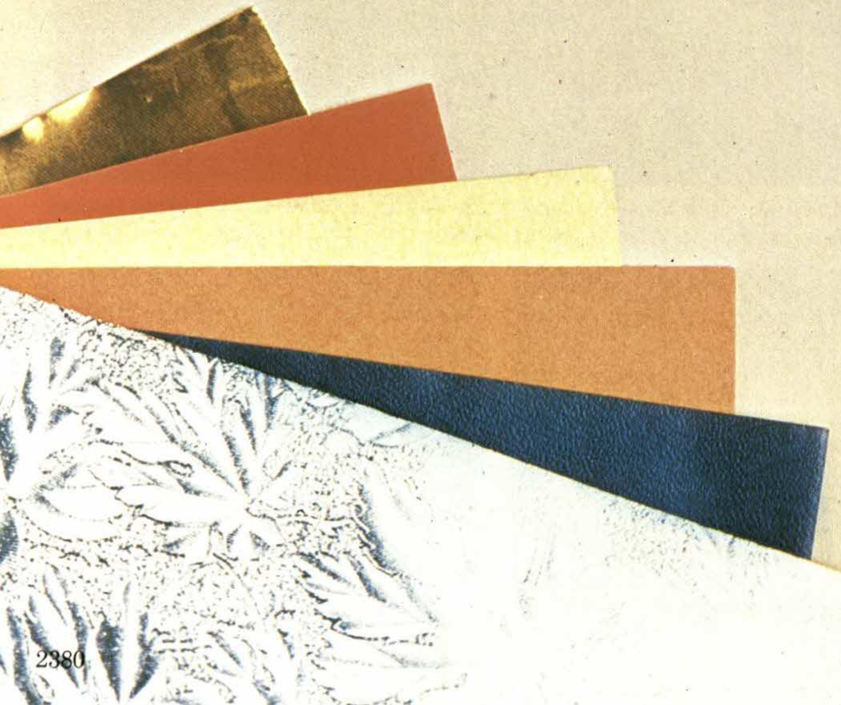
Hand-made papers. These are expensive and only available in a few shops. They have an interesting, non-mechanical appearance. Since any vegetable texture can be incorporated into the paper there is great scope for making different types of paper.

Ingres paper. Tends to be expensive. Has an unusual and non-mechanical appearance with hair-like fibres showing on the surface of the sheet—this texture may be used in craft work. This paper folds well and does not crack.

Ivory board. Hard white boards made by pasting two or more webs of paper together. It has a beautiful finish and is expensive (at the top end of the board market).

The look-through (translucency) of some ivory boards is such that they are suitable for lampshades.

Japanese papers. These are hand-made from exceptionally long fibres to produce either fine or white vellum papers which are very tough because the fibres pull apart rather than tear. It is good for wet rubbing on stone or metal since it has great wet strength.



Steve Bicknell

Creative ideas 85

Safety-pin belt

Both the Greeks and Romans fastened their tunics with pins similar to today's safety-pin, which has changed little from the original bronze version.

In medieval Europe elaborate hand-made pins were costly and worn for their decorative value by the wealthy. From the early 19th century however, the functional safety-pin has been machine made and inexpensive.

Here, in the form of a 76cm (30″) belt, it is restored to its ornamental as well as functional role.

You will need:

Two gross 2.5cm (1″) safety-pins with small heads.
28gm (1oz) small blue beads.
300 black beads (slightly larger than blue beads).
400 silver beads.
Clear adhesive such as Evo-stik (optional).
Buckle and fastener.

The belt consists of two identical rows. In each, three or four pins threaded with beads are used alternatively and held by a plain pin strung vertically.

To assemble the belt, begin by threading a pin alternately through the head and tail of seven pins with the opening sides uppermost. Then lay them down flat on a table so that four pins lie to the right and three to the left of the vertical pin.

Unclip one pin at a time and thread the beads. The beads follow a regular pattern, repeated throughout, as shown in the photograph.

Before closing the pins again apply a small blob of adhesive on inside of each pin head, if desired. This will prevent the pins from springing open.

Continue threading pins and heads in several short lengths, so that the overall weight is not too heavy. Do not stick outside pins on each short length as these will need to be opened again. At each stage lay the pins down, beaded side uppermost, and check that you are threading them correctly.

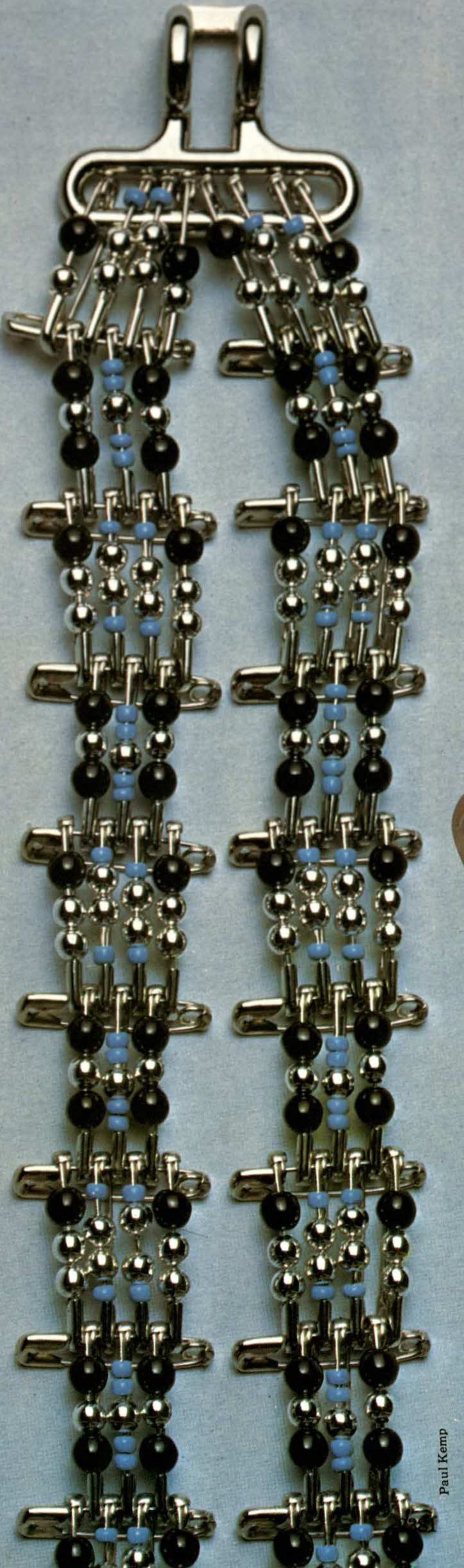
Join lengths together until belt is correct size.

Thread final group at each end on to buckle and fastener (removing a bead if necessary to close pins). Secure with adhesive.

Designed by Stacy Carr.

Wear this belt at hip level or to accentuate a slim waist.

Sandra Lousada



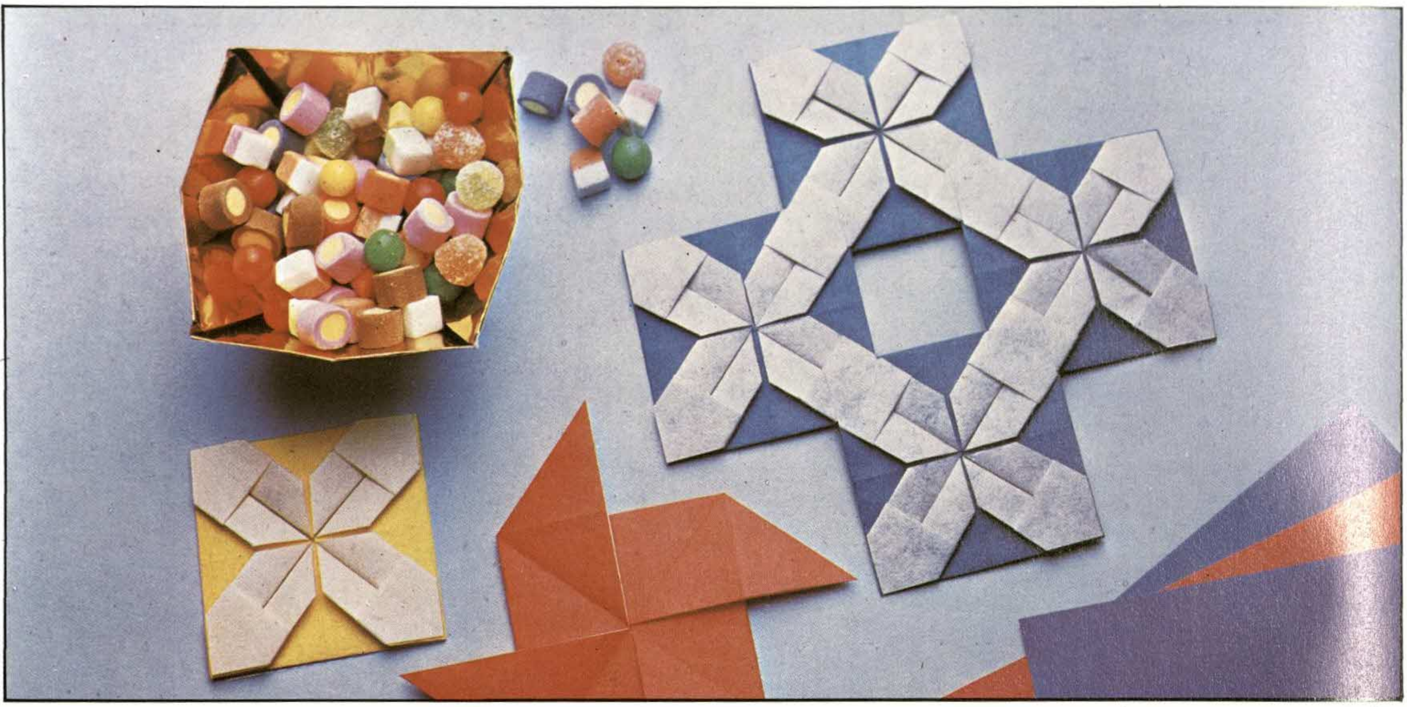
Paul Kemp

More origami designs to make

Paper 61

The preliminary fold, discussed in Paper chapter 60, page 2355, is the basis of many origami designs. The designs may at first appear difficult but become very easy to make with a little practice.

Four colourful things to make from paper—a container, a coaster and a pin-wheel. Try joining several coasters together to make a geometric pattern.



Paul Kemp

Iris

Like the container, this model also starts with a square piece of paper and is based on the preliminary fold.

☐ With the open edges of the preliminary fold away from you, valley fold the top left-hand flap on the dotted line, and begin to open out the flap (fig.9).

☐ Open the flap fully (fig.10) and press it flat (fig.11).

☐ Turn over the figure and repeat with the three remaining flaps, so that it looks like fig.12.

☐ Valley fold on the dotted lines (see fig.12), bringing top flaps to centre.

☐ Raise the flaps slightly and pull out and down from top point X (fig.13).

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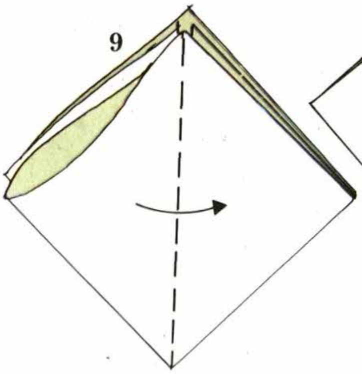

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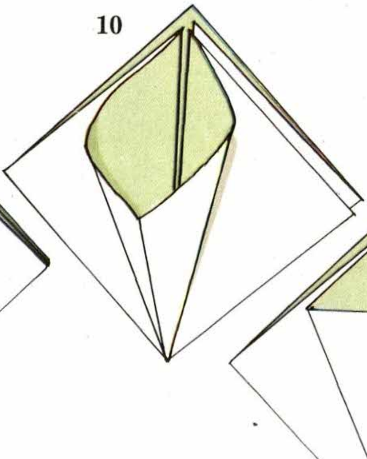

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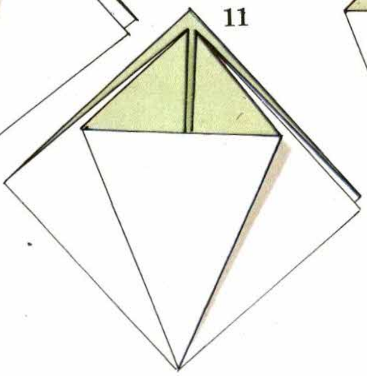

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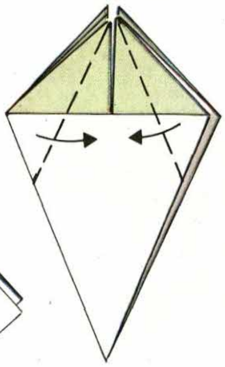

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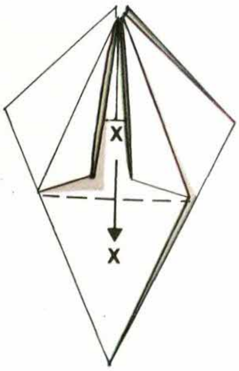


Container

You could make several of these containers to hold cigarettes, bon-bons or nuts. A larger model could be used as a waste paper basket.

Use a square piece of paper, about 20cm x 20cm (8″x 8″). If the paper is patterned or coloured on one side and plain on the other, place it coloured or patterned side up, and make a preliminary fold.

☐ With the open edges of the preliminary fold facing you (fig.1), valley fold the top (farthermost) point down along the dotted line shown (see fig.1). Open out.

☐ Sink the top point into the centre of the model by reverse folding the crease lines just formed into the centre (fig.2), then flattening along two facing creases to look like fig.3.

☐ Valley fold the side flaps to the centre (see fig.3). Repeat behind.

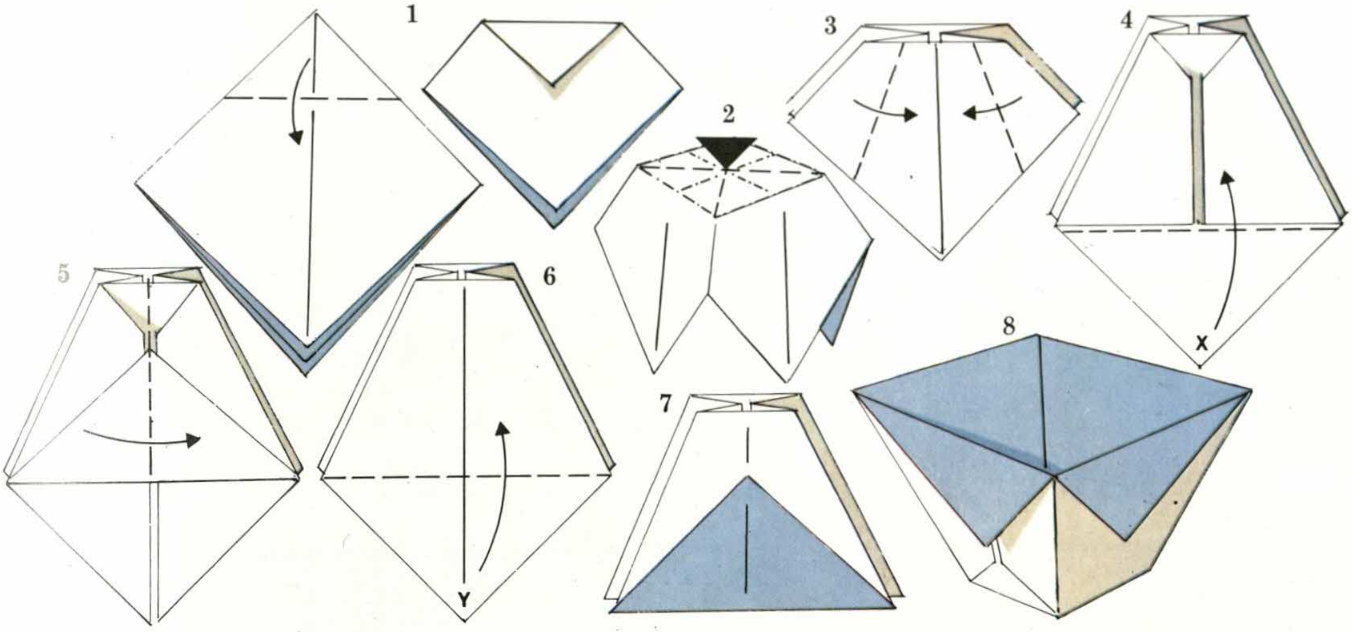
☐ Valley fold the top flap X up along the dotted line (fig.4). Repeat behind.

☐ Book fold the top left-hand flap over the right (fig.5). Repeat behind.

☐ Valley fold the upper flap Y along the dotted line (fig.6). Repeat behind.

☐ Hold the model upside down and open from the centre (fig.7). Flatten the inside point slightly.

Fig.8 shows the completed container.



☐ Continue pulling downward until the two points X meet (fig.14) and the fold is pressed flat (fig.15).

☐ Repeat figs.13 and 14 on the three remaining sides to reach fig.15.

☐ Valley fold the central flap upwards on the dotted line shown in fig.16. Repeat on the three remaining sides.

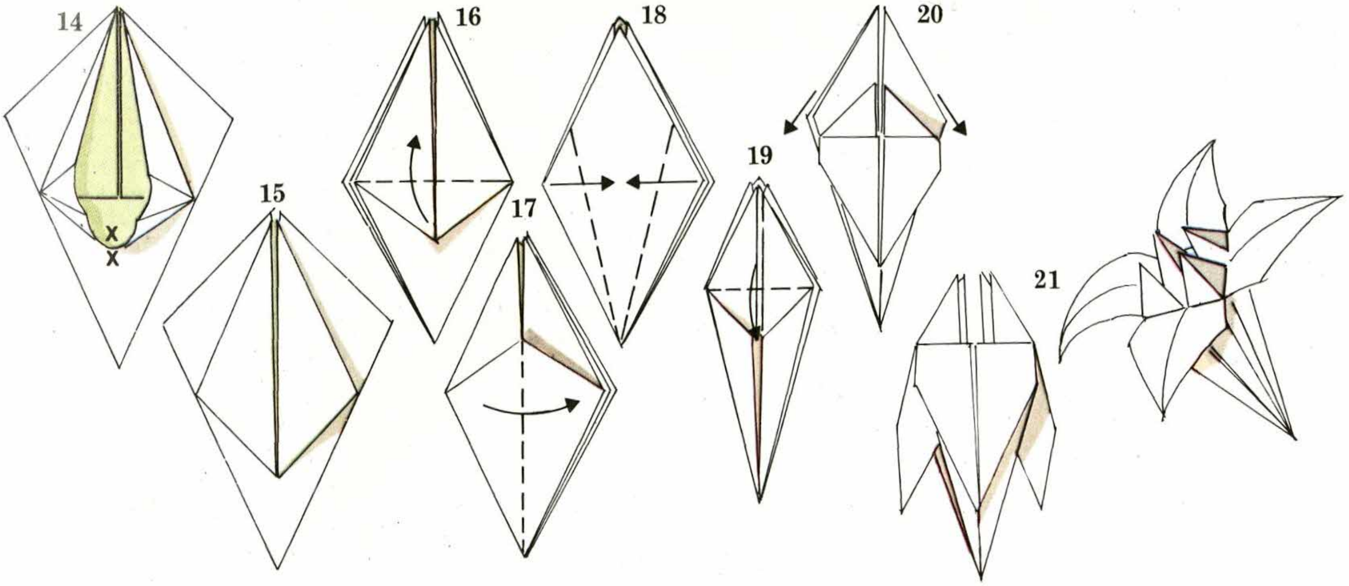
☐ Valley fold the top left-hand flap along the dotted line (fig.17).

☐ Valley fold along the dotted lines, bringing the sides of the top flaps to the centre (fig.18). Repeat all round.

☐ Fold the front flap down (fig.19). Turn the model over and repeat.

☐ Pull out and down on the two side flaps (fig.20).

Fig.21 shows the completed flower.



Trevor Lawrence

Pin-wheel

For this design, which can be used to make the coaster described in this chapter, take a square sheet of paper and place it plain side up if the paper is patterned or coloured on only one side.

☐ Fold the paper in half vertically, and open out. Fold the paper in half horizontally, and open out. Valley fold top and bottom edges to the central horizontal fold (fig.22).

☐ Valley fold side edges to the centre (fig.23).

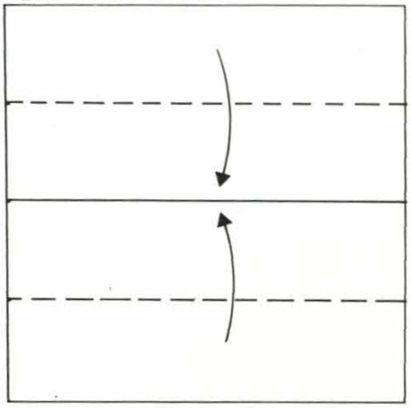
☐ Fold the top and bottom central points to the sides as shown (fig.24).

☐ Take hold of the top central point and pull out the concealed flaps on either side, following the direction of the arrows (fig.25).

☐ Take hold of the bottom central point and pull out the concealed flaps (fig.26), in the same way as for fig.25.

☐ Fold the top right-hand flap up and the bottom left-hand flap down (fig.27). Fig.28 shows how the completed pin-wheel will look.

22



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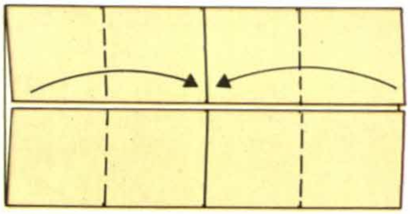

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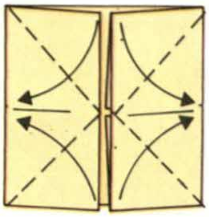

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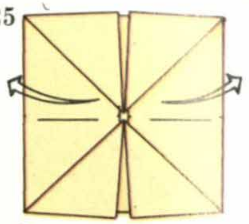

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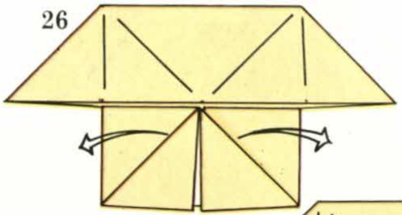

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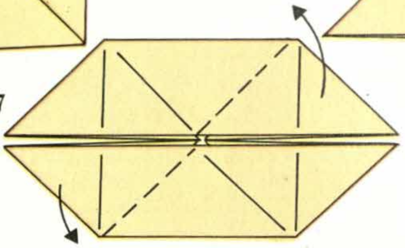

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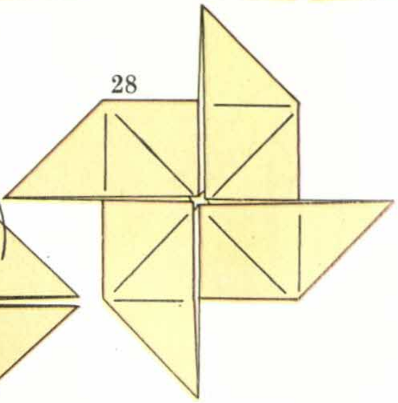


Coaster

You could make a set of coasters for a party, or fit several together to make a table centre-piece or a wall decoration. Begin by making a pin-wheel (see figs. 22-28).

☐ Squash fold the four corner flaps along the lines shown (fig.29).

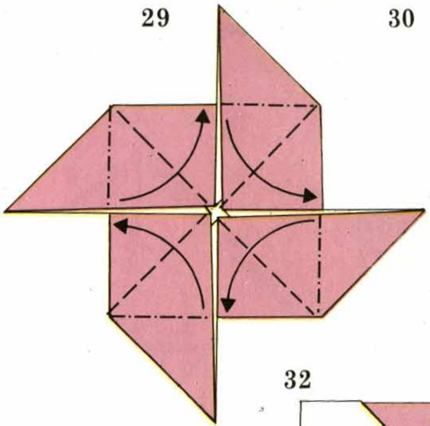
☐ Valley fold the four central flaps out to the corners (fig.30).

☐ Mountain fold the two side points of each of the four corner squares (fig.31).

Fig.32 shows the completed coaster.

☐ To fit several units together, slide the upper flap of one corner of a coaster over the whole corner of another, so that they are held together (fig.33). To hold them together more firmly, glue the corners together with clear general-purpose glue such as Bostik 1 or UHU. An attractive geometric pattern is produced by fitting 16 coasters together (fig.34).

29



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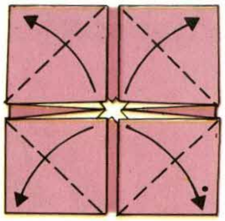

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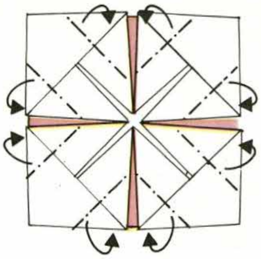

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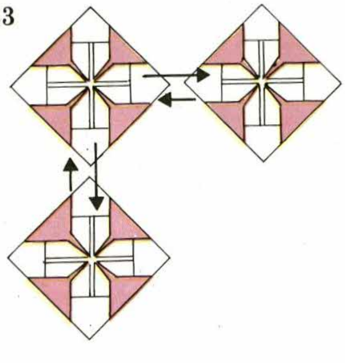

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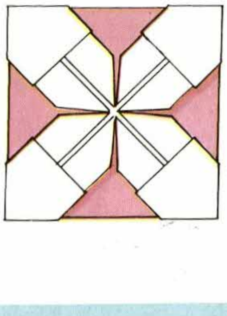

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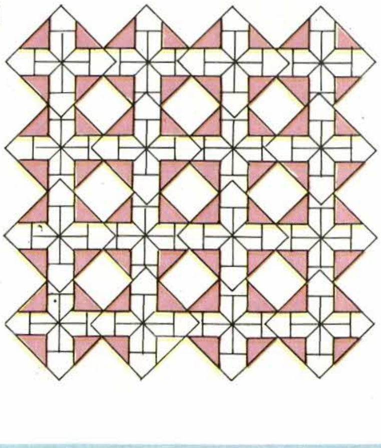

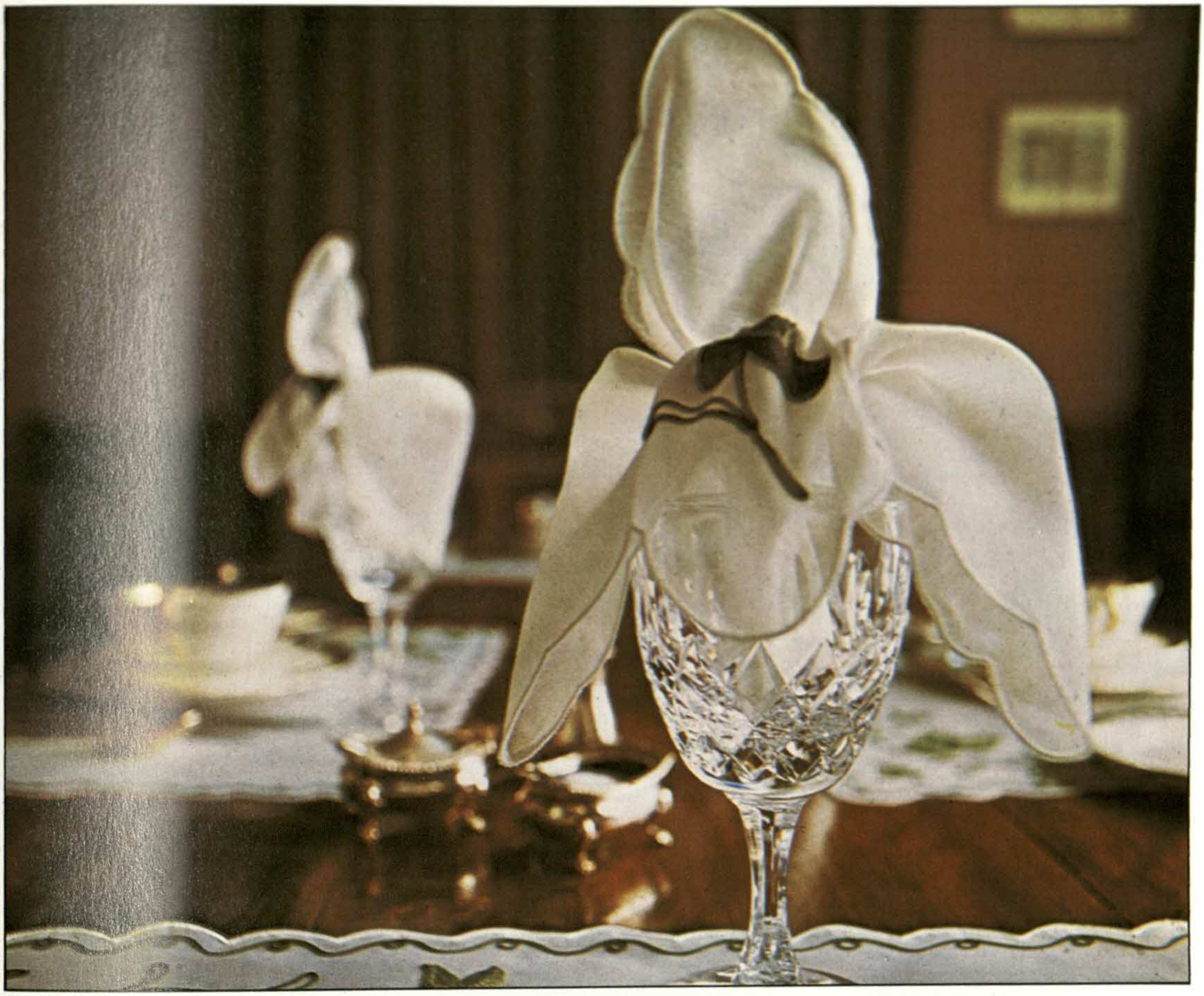

Geoffrey Frosh

Orchid table napkin

Use your knowledge of origami folds to make paper table napkins into orchid shapes which can be placed in wine glasses to decorate a table for a dinner party.

The orchid is best made from a large napkin which should be ironed with a cool iron first, to smooth out the creases.

☐ With the napkin opened out and placed diagonally, first fold two corners together to make a horizontal crease. Valley fold the sides along the dotted lines to meet in the middle (fig.35).

Add a touch of elegance to your dining table by folding cloth or paper napkins into orchid shapes.

☐ Valley fold the sides to the centre again, making firm creases (fig.36).

☐ Now valley fold the elongated napkin in half so that the bottom point reaches the top (fig.37).

☐ Valley fold the model in half as indicated (fig.38). (This movement must be done with care since the paper is now several layers thick and therefore more difficult to fold.)

Fig.39 shows the completed figure, seen from the side.

☐ Now place the base of the napkin in a suitable glass or goblet—one into which the napkin fits tightly so that the folds are held together. With the inside folds facing you, open out and pull down the two outer petals. Open out the central petal which is in two layers, and pull down the first layer as shown above to make a four-petalled orchid.

You could use linen napkins to make the orchids; if the napkin is ironed along each fold as it is made, this will help keep the folds in place.

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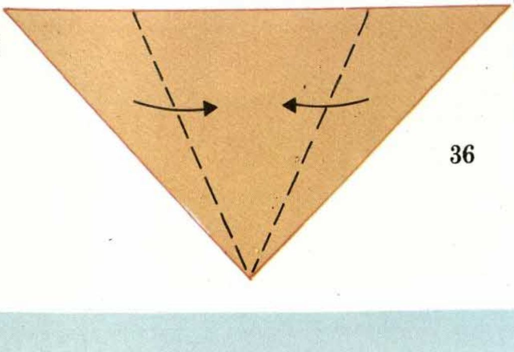

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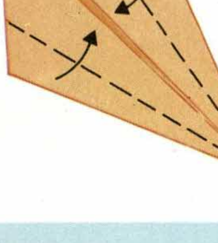

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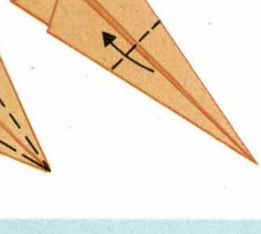

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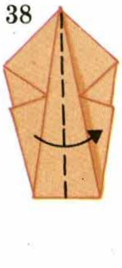

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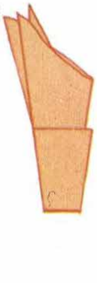
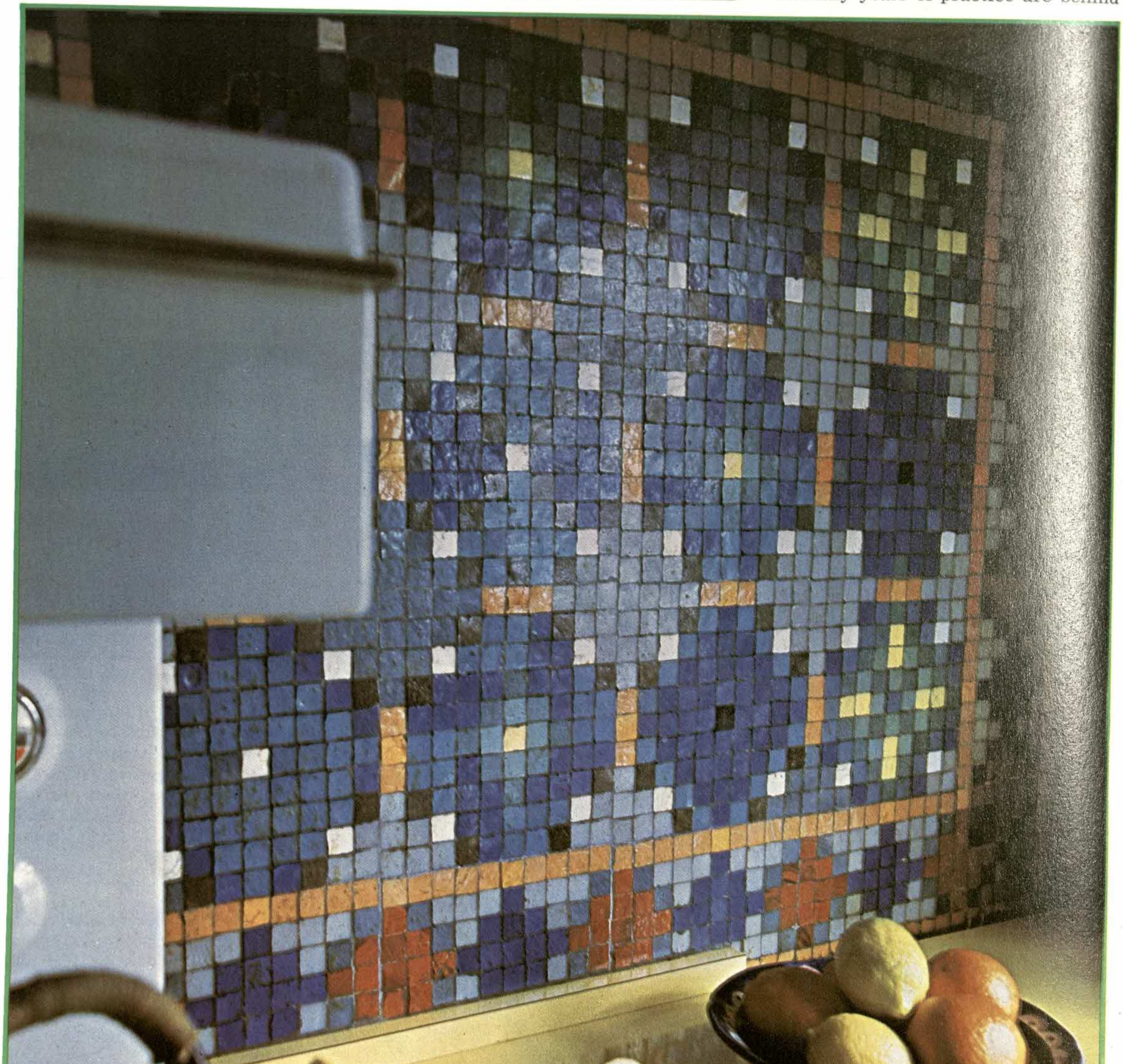


Trevor Lawrence

Interior wall mosaics

Traditionally mosaic is a mural art or, as in Roman times, a flooring material. In the modern home there are two obvious places where you could try out wall mosaic: the kitchen and bathroom, though the latter is made slightly more complicated by the need for waterproofing. No amateur, unless he is a skilled plasterer, should attempt to cover a whole wall with mosaic. Literally years of practice are behind



Geoffrey Frosh

those effortless-looking movements with which the professional spreads his plaster like butter and smooths it out with a float.

It is better to confine first efforts to a small area where your work will be seen and appreciated. A good place to start would be with the gap between the kitchen work-top and the wall cabinets. Other simple projects would be a mirror surround for a cloakroom or a surround for a sink back.

Making a template

The first step is to make an accurate paper template of the area you mean to cover.

☐ Measure carefully and draw a full size paper template, being particularly careful about electric points that you may have to work around. Ideally, a flat piece of wall with no obstacles should be used.

☐ Cut out the template and position it on the wall, then correct any errors. It should fit comfortably; better to have it 6mm (¼") too small to allow for expansion of mosaic joints than too tight.

☐ Using a pencil, draw your design on the template. This is far better than making a small design and enlarging it as you will get a better sense of scale.

☐ Once you have drawn the basic outlines replace the template against the wall to see how the design suits the space.

☐ When you are really satisfied with the drawing, colour it in with the colours appropriate to the design and replace it against the wall.

Time spent on this stage of the work always pays in the long run and helps to avoid disappointments. Sometimes a design which looks attractive when lying flat, looks quite different when seen vertically.

☐ Having decided on your design take a piece of matt tracing paper, make it exactly the same shape as your template and very carefully trace on your design with a ballpoint pen. Reverse your tracing paper. What was on the left will now be on the right.

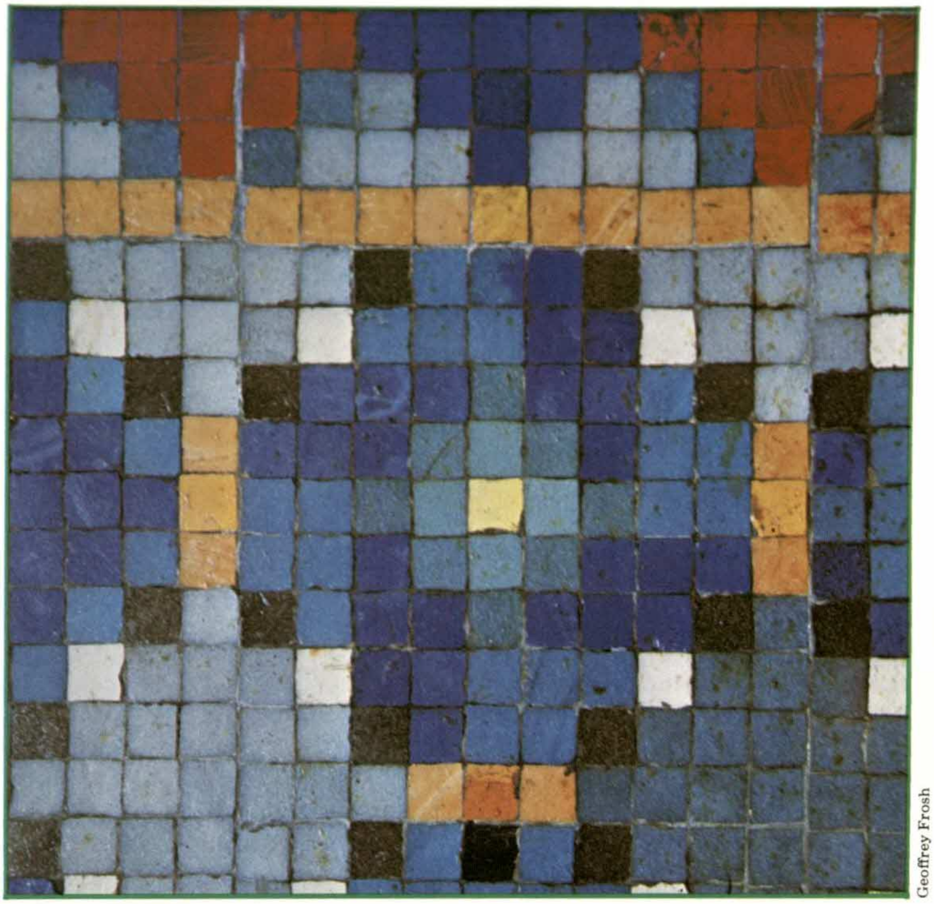
☐ Stick your mosaic face down on the template.

Note: if your panel is more than 30cm sq (1ft sq), to facilitate sticking the mosaic divide it into numbered sections as you will find it difficult to handle anything much bigger. Try to let your cuts (which will eventually become your joins) come in places where they will show as little as possible (fig.1).

Preparing the wall

Having completed the mosaic on paper,

Left: mosaic makes an ideal and original kitchen wall covering. It will brighten up a dull room and, at the same time, it is easy to keep clean.



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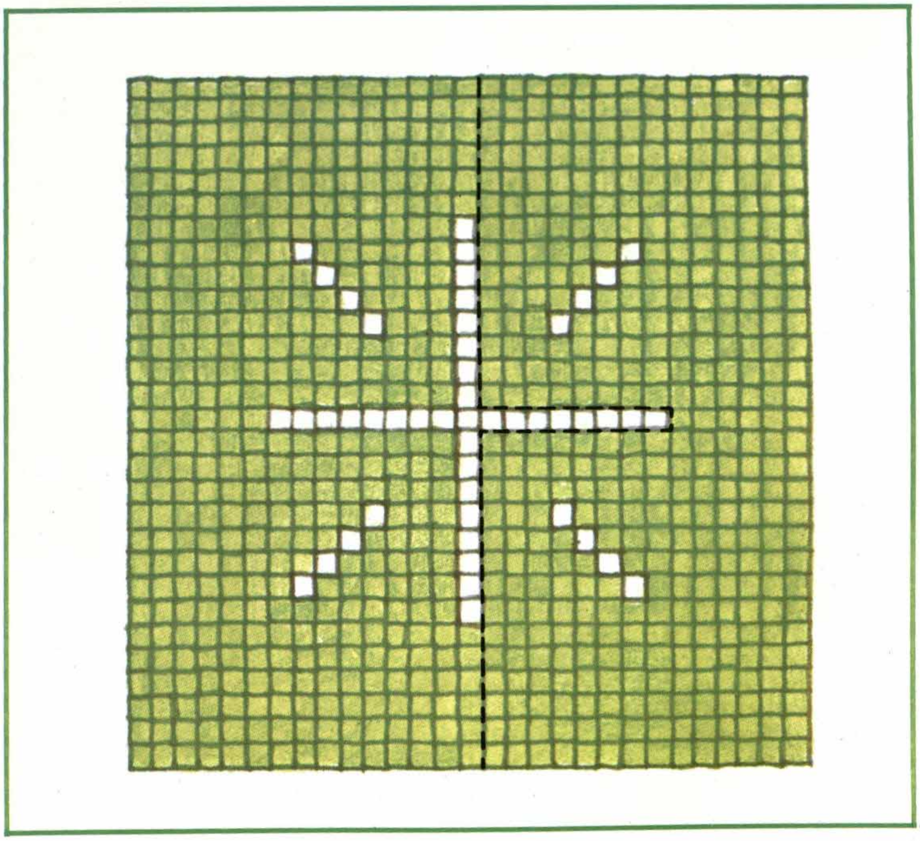
Above: time spent on planning a suitable design is important. Make a tracing from this detail of the kitchen mosaic and use it for a small project.



1. *Lay large areas of mosaic in sections. Join sections in the most natural place possible. The broken black line indicates a suitable join for this design.*

the next step is to decide the type of fixing to use. This will depend very much on what type of wall and what wall finish you have to contend with.

An old wall, covered in paint or wallpaper will have to be stripped. If underneath you find what looks like a sand and cement screed give it a coat of PVA adhesive, let it dry for a day or two and then fix the mosaic. Any reasonable-looking old plaster that is not crumbling or bulging in any way should also be painted with a coat of PVA adhesive.

Damaged plaster. If the plaster, of whatever composition is clearly all but dropping off the wall, do not hope that the mosaic will help it to stay there. Just the opposite, the weight of the mosaic will pull it away completely.

Hack off the old plaster and replaster before fixing your mosaic, or treat the whole thing like a table, ie make your mosaic on plywood and screw the whole panel to the wall. You will have to leave out the mosaics in the spaces where you plan to put your screws and glue them on afterwards.

Modern or new walls. When dealing with new walls, do not touch them until they have completely dried out. Some modern plasters are of the non-suction type and completely useless for mosaic. If possible consult a builder before embarking on your project. If this is not possible and you are still in doubt, use a plywood panel as a base for the mosaic.

Fixing mosaic

This section refers to fixing wall mosaics which do not require waterproofing. A technique suitable for bathrooms is described further on.

Before fixing the mosaic to the walls, protect the floor or cabinet top with plastic sheeting. Be warned—fixing is a very messy business. The working area is going to look a lot worse before it looks better.

You will need:

Cement.
PVA adhesive.
Mosaic design prepared on tracing paper.
Hammer.
Sponge.
Board.
Palette knife.
Silicone wax.

☐ Mix a bowlful of cement and PVA adhesive (Mosaic chapter 3, page 446). 3kg (7lb) of cement will be sufficient for about 1.2 metres (4′) square.

☐ Spread one section of the wall with cement mix as evenly as possible, no more than 6mm (¼″) deep.

☐ Turn to the corresponding section of mosaic, which should be lying flat, as nearby as possible, and quickly cover the back with the same mixture.

☐ Hold it vertically and place it up against the prepared wall pressing the two surfaces firmly together.

☐ Always hold the sheet of mosaic from the top. If you try to hold it flat you will find the whole thing will disintegrate.

It is important at this stage to move as fast as you can, as the water from your cement will very soon start to dissolve your glue. If your mosaic is more than 30cm (1′) high and you are assembling it in sections, you should start by fixing the lowest section first. However, for a first attempt it is wise to stick to a simple frieze not more than 30cm (1′) deep.

Finishing

Once the section is safely on the wall, take a flat piece of wood and a hammer and systematically begin to tap the mosaic home into the cement. You should feel the tesserae biting into the cement as you tap along your piece of wood. It is important to do all the fixing on the same day otherwise, the joins between the sections of mosaic will show. It is at this point that the tracing paper you have used will come into its own and you will be able to see that you are matching up your pattern correctly.

When all the sections are in place, very carefully peel back a bit of the paper where the sections join to check that all is well. You will only need to peel back about 2cm (1″) to discover if there is any trouble.

The most common problems are too big a gap between sections and that the edge stones have dipped into the cement. These problems have to be dealt with straight away using a palette knife and a little fresh cement. If, for some reason, you cannot finish all the fixing in one day, be sure that where you end the day's work you scrape away all the extra cement that protrudes beyond the stones. When you do continue you will have no trouble fitting new work next to old.

Removing the paper

It requires a great deal of patience to remove the paper without taking the mosaic with it, so it is important to allow the mosaic sufficient time to set—at least two hours.

With a sponge and warm water begin to dampen the paper. Patiently go over and over it, until a very gentle pull will bring a large strip clean away. Once you have removed all the paper, continue with the sponge and warm water washing until all the glue and excess cement has been removed from the surface of the mosaic.

Grouting

The mosaic should hardly need grouting from the front, the tapping should have brought sufficient cement into the joints. If, however, there are a few gaps, don't fill them until you have cleaned the surface. Wipe the mosaic with an almost-dry cloth until the surface is practically shining and leave it to dry. After a day or two, if it is still too grey, wash the surface with mild detergent and dry it immediately. If you leave water to dry on the surface it will leave streaks. When you are sure the mosaic has completely dried out, wax it with a good silicone wax.

Bathroom mosaics

These are altogether trickier as they have to be waterproof. A shower or bath are not for an amateur to tackle, but there are many places in the bathroom where a semi-waterproofed finish is sufficient.

Insert a series of small mosaics among the tiles in your bathroom. This turns a conventional tiled wall into something more interesting. If you are having a room newly tiled, tell the builder where you would like him to leave the spaces. If, on the other hand, you want to liven up a previously tiled bathroom, take a hammer and chisel and boldly hack out the tiles.

A good clean blow in the middle of a tile usually manages to crack it so you can soon chip your way into one of the cracks and begin to lever the pieces off. Old screwdrivers are very useful for this—do not use a carefully sharpened carpenter's chisel as this could be irrevocably damaged.

You will need:

Old screwdriver.
Blunt chisel.
Mosaic design prepared on tracing paper.
Cement and PVA adhesive mix.
Waterproof grout.

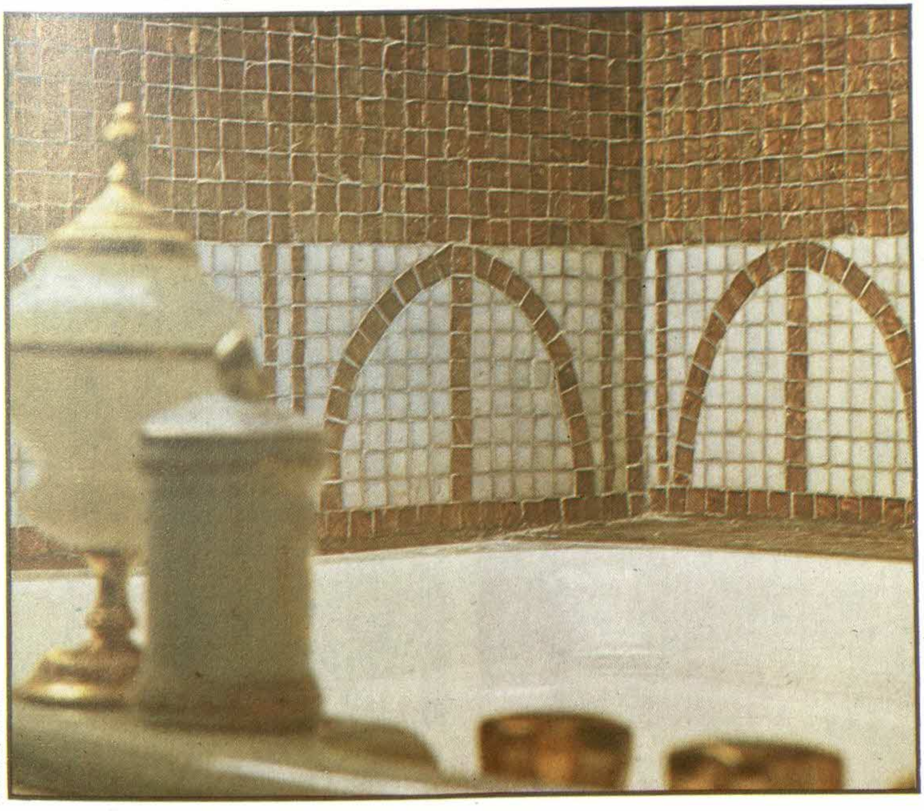
☐ Having cleared the space, make a paper template and proceed with the mosaic on paper as for kitchen mosaics. The difference arises with the fixing which has to be with waterproof grout.

☐ Put the usual cement and PVA adhesive mix on the wall.

☐ Instead of putting this mixture on the backs of the tesserae, 'butter them' with waterproof grout. This can be purchased from mosaic suppliers or under various trade names in tile and hardware shops. It is a white powder and needs a lot of patient mixing. Whereas cement and water combine readily, this is like mixing cocoa and resists water. Even after you have combined it to a spreadable mix, it is advisable to leave it for 15 minutes before use, as it will often absorb more powder.

Bear in mind when choosing your colour scheme that this grouting will dry brilliant white unlike the grey of portland cement. Any gaps in the grouting will have to be filled from the front.

Bathroom mosaic requires waterproof grouting which dries brilliant white.



Geoffrey Frosh

Large areas of tiling can be relieved with a simple mosaic border.

Mosaic—a change from bathroom tiles.

The direct approach

When you feel you have had enough experience of the medium and would like to work more freely, try sticking mosaic directly into wet cement. Using this method you will not get a very flat surface. This makes it unsuitable for tables or surfaces which are frequently being wiped. There may be a niche on the stairs or in the hall or perhaps a small alcove by the fire-place where a glowing piece of mosaic texture will be just right.

To lay mosaic direct you need plenty of practice, but the possibilities of varying overall texture are so enticing it is worth persisting.

The texture can be varied by using pebbles, shells, broken pieces of china or porcelain, pieces of glass, fragments of tiles, copper or brass bits and pieces. All will make the total effect richer and more interesting. (Use only non-ferrous metals or you will have trouble with rust.)

You will need:

Marine ply at least 1cm (½") thick or blockboard.

Cement and PVA adhesive mix.

Wood primer.

Tesserae and/or pebbles, broken pieces of china and porcelain, pieces of glass, fragments of tiles, copper or brass bits and pieces.

☐ Prime both sides of the marine ply or blockboard as for a table. Lightly sketch your design on the board. It should not be too detailed; a general outline is all you will be able to follow.

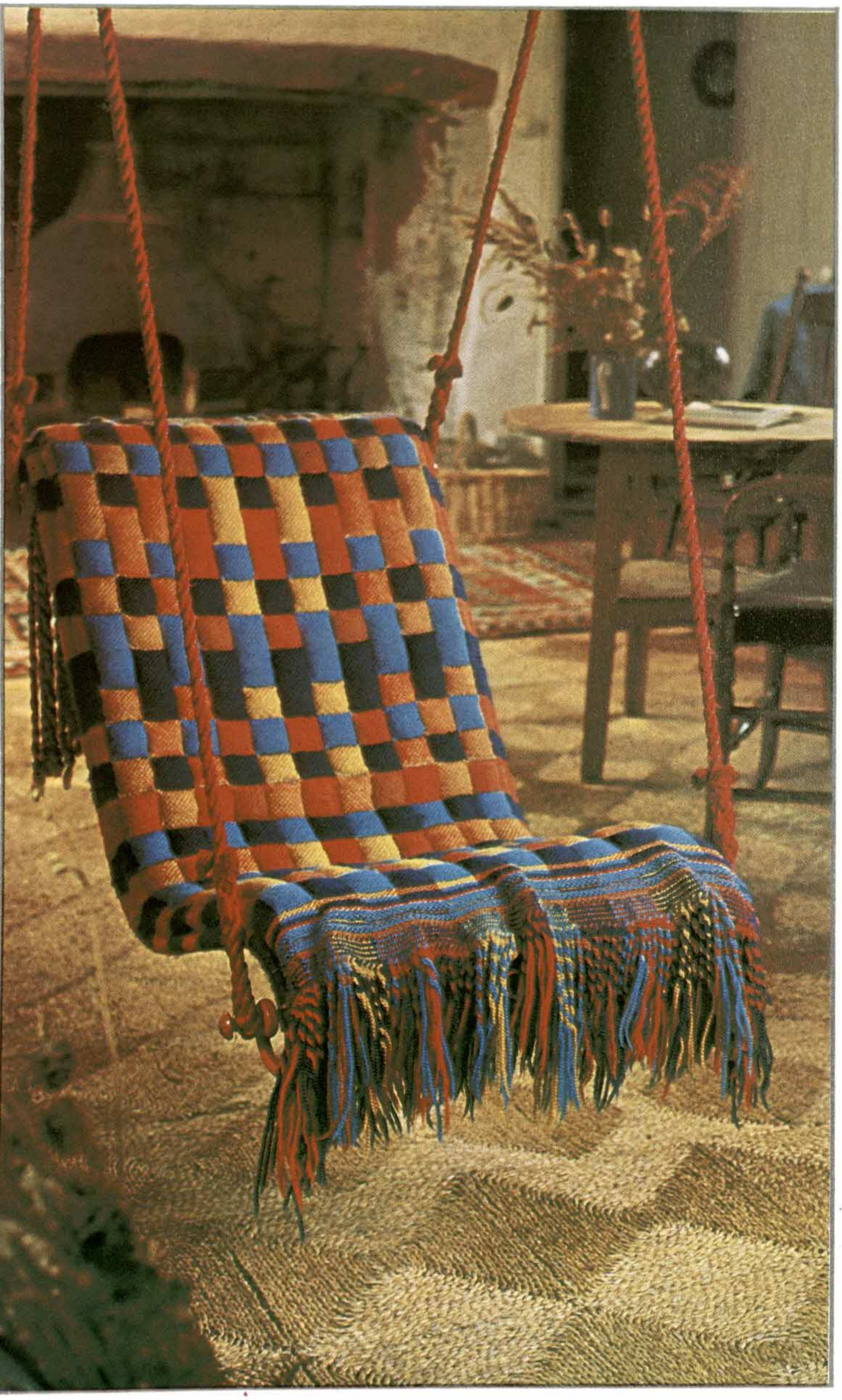
☐ Fill one section of the plywood at a time with cement mix, no more than 6mm (¼") deep.

☐ Begin pressing your tesserae into the cement. Press hard enough to feel the pieces are securely held but not so hard that they become buried in the cement.

If the texture of the cement is correct and you have exerted adequate pressure, the soft cement should just about come level with the stones as you work but not overlap them.

On the whole it is better not to grout this type of work. If there seem to be yawning gaps in one or two places, try using a little grout but do not do any overall filling as it will spoil the fresh appearance of the work.

Doublecloth fabric weaving



Geoffrey Frosh

A hanging chair upholstered in padded doublecloth. Designed by Alison Mitchell.

A doublecloth by definition is made up of two series of warp and two series of weft threads. The loom is threaded up in a special way so that when woven the sets of threads separate to form the two layers of cloth. One series of warp and weft forms a cloth on the surface while the other series forms a back cloth. These cloths join together either at the edges or by the sets of threads interchanging at certain points.

Doublecloth is one of the oldest weaving techniques and was used extensively by the Peruvians because of its weight, durability and pattern possibilities. The weaves are versatile and the variation in types of cloth and design is enormous.

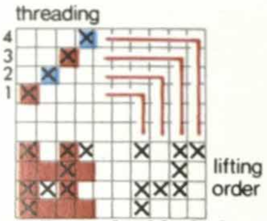
Depending on how the loom is set up and the order in which the weft is used, it is possible to weave fabrics of different shapes. For example, you can weave a tube or two separate pieces of cloth, a reversible piece or a single piece of cloth double the width of the loom when opened out. You can even make a complete cushion on the loom.

Basic structure

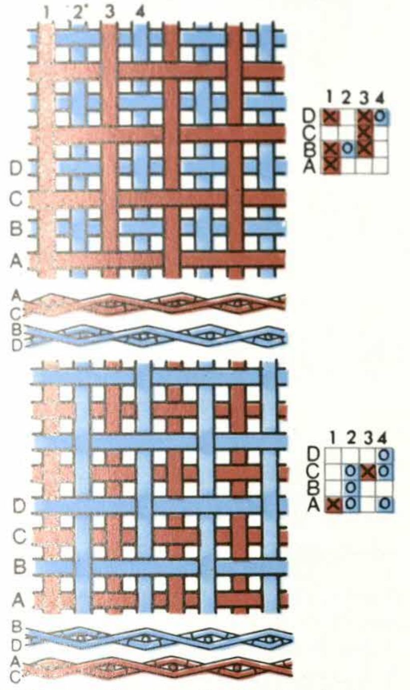
Many of the examples included can be woven on the simplest doublecloth structure which requires only four shafts. Two of the shafts create one plain weave cloth, the other two shafts make the other plain weave cloth. The picks weave the two cloths alternately. Fig.1 shows the basic draft and weave diagram with one cloth on the surface and the second underneath. The draft has two colours, red and blue, each representing a warp. Therefore, warp one (red) is threaded on the odd shafts and warp two (blue) is threaded on the even numbers. This is a quick way of checking that you have the threading right.

As you can see, the weave diagram has an extra piece of information. As well as crosses to show which warp thread is up, it also shows which colour appears on the surface. This is the basic concept of doublecloth, for, by threading and lifting the shafts in this way, you create two layers of cloth. This is because the two series of threads never interlock so that they are never woven together as in a normal cloth. Fig.2 shows a cross-section of the cloth and how the sets of threads react when woven. It is a difficult concept to grasp but if you simply follow the drafting and lifting plans the doublecloth will just happen! (For full details on how to read weaving drafts see Weaving chapter 27, page 2302.)

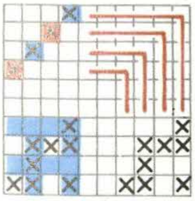
The sett of any doublecloth is very important. If the cloth is too close it will not weave. Because you are weaving two cloths you will need double the number of ends you would with a single cloth. Therefore,



1. *Basic doublecloth.*

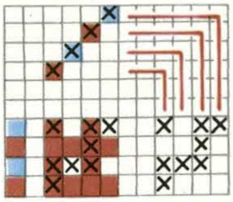


2. *The mechanics of a doublecloth.*

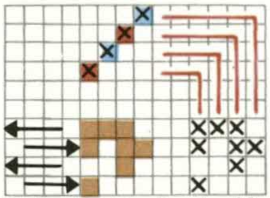


Coral Mula

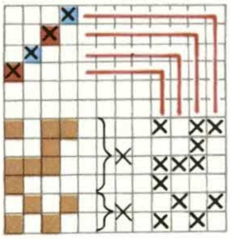
3. *The reverse cloth.*



4. *Two separate cloths.*



5. *Weft direction for double width.*



6. *Tube weave for cushions.*

double the number of threads must be threaded. For example, if each cloth is sett at eight ends per 2.5cm (1″), you must actually have sixteen ends per 2.5cm (1″) in the reed. It is often possible to open the sett of a doublecloth slightly because the cloth will be double the weight. This will make the cloth easier to weave and slightly lighter.

According to the type of cloth you wish to weave you will need either one or two wefts.

Two different cloths

If, when designing a doublecloth, you decide to have two differently coloured cloths, one on the surface and one below, you need to warp alternate colours. Beneath the draft (see fig.1) is the cloth structure in which cloth one, the red colour, is on the surface. Fig.3 shows the reverse cloth, the blue one on the surface.

To weave two separate cloths at the same time, use the same lifting plan as in fig.1, but use two wefts. This technique doubles your production and speeds up the weaving process. Fig.4 shows the weft order on the left-hand side of the cloth structure. In the first pick use the red weft to correspond with warp one. In the second pick use the blue weft. Continue alternating the wefts.

To weave a tube, use the threading and lifting plan in fig.1. This is the simplest of all the weaves and you only need one weft. In fact, a tube can only be woven with one weft.

A reversible cloth is woven in exactly the same way as this but you must link the two wefts together at the selvedges by looping them around each other. This creates a very thick cloth as it is two cloths together. The linking technique with the weft is always necessary if you want a closed or joined edge to a doublecloth.

Double width cloth. The double width cloth is a very successful technique often used for making blankets or table-cloths because a wide fabric can be made on a loom half the width of the resulting cloth. For this cloth it is extremely important to follow the correct direction in which the weft is entered through the shed. In this case the top and bottom fabrics are connected on one side only and only one weft is used. The weft must pass over and back on the top cloth and then drop down and pass over and back on the bottom cloth. The same draft (see fig.1) can be used as for the previous examples but the lifting order has to be rearranged.

As the same picks are used, the resulting cloth will have the same weave. The lifting order and the weft direction (fig.5) are what make the cloth work. If fig.5 is not followed the technique will not be successful.

Cushions on loom

By introducing plain weave it is possible to weave a cushion completely on the loom. Again it is the same basic draft (see fig.1) but with the structure and lifting plan shown in fig.6. This shows the lifts for plain weave and for doublecloth. The brackets on the draft mean that these sections can be repeated as many times as you like so long as the different sections are kept separate.

Leave enough warp unwoven at the beginning for a fringe and wind it on to the warp beam.

Begin weaving in plain weave. The number of picks necessary will depend upon the yarn used and the size of the cushion but it is important to weave enough so that the warp threads will not slip.

Now change to doublecloth weave using only one weft to give you a tube. Continue weaving until you have the correct proportions for your cushion.

Then slacken the warp tension and separate the two cloths and push a cushion pad into the tube.

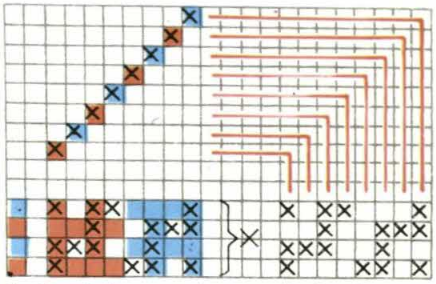
Tighten the tension and finish the cushion by returning to a section of plain weave and then adding a fringe.

It will be necessary to beat the first few picks of the second section of plain weave very hard in order to hold in the cushion.

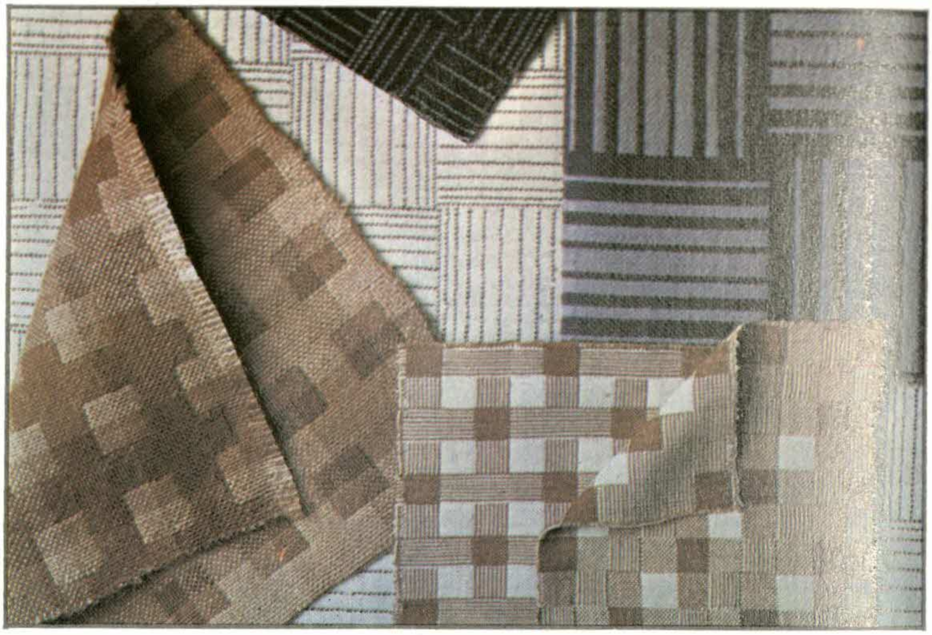
It is only possible to pad small cushions actually on the loom. If you want to make larger ones or you want to have a cushion in which the cover can be removed, simply replace the tube weave with a double width weave and this will leave an opening down one side of the cushion cover.

Paul Kemp

Cushions can be made on the loom by weaving tubes or double width cloth.

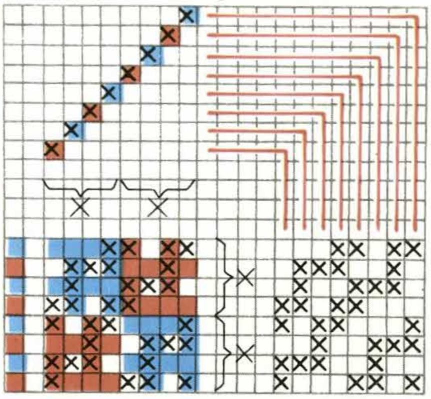


7. *Draft for weaving vertical tubes.*



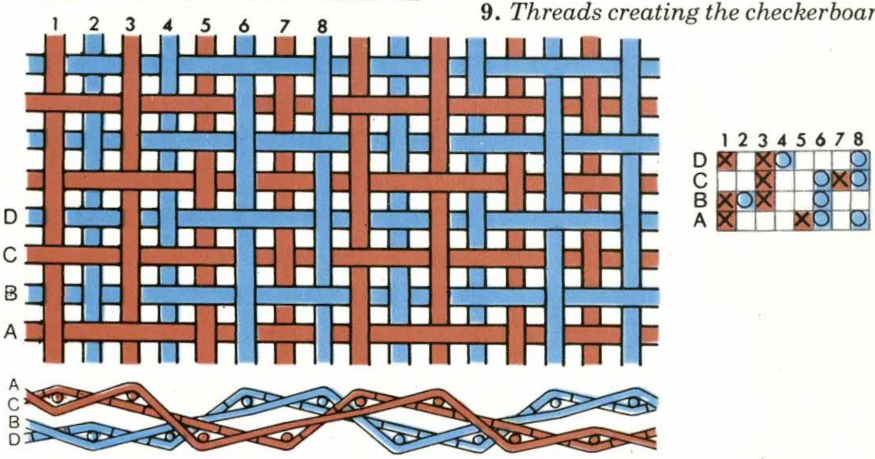
Paul Kemp

Above: a range of interchange doublecloths. designed and woven by Wendy Jones.

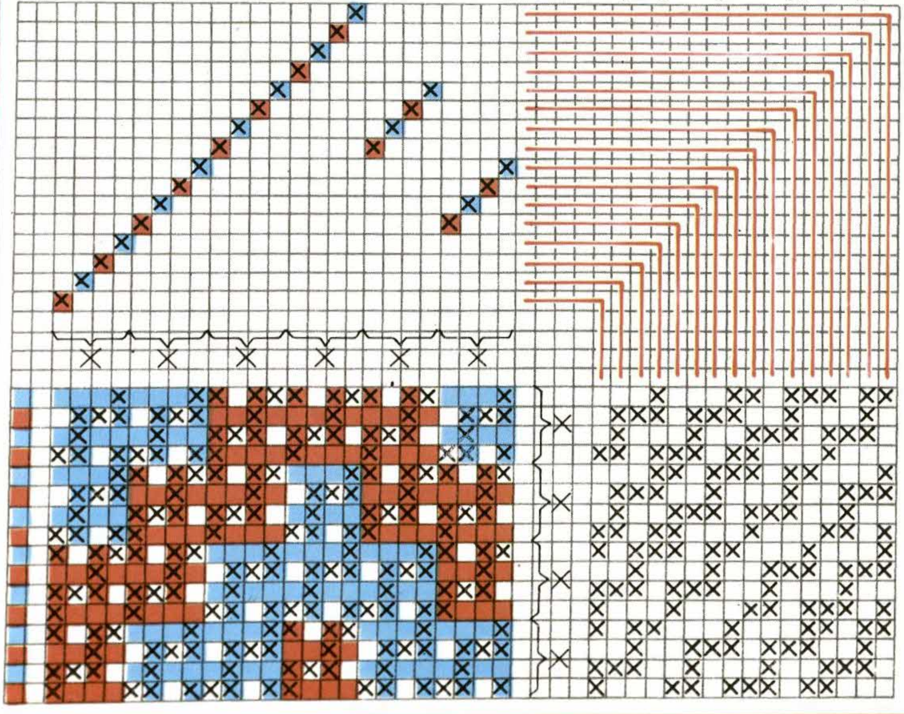


8. *Interchange for checkerboard effect.*

9. *Threads creating the checkerboard.*



10. *A complex interchange doublecloth on sixteen shafts giving a stepped effect.*



Interchange doublecloth

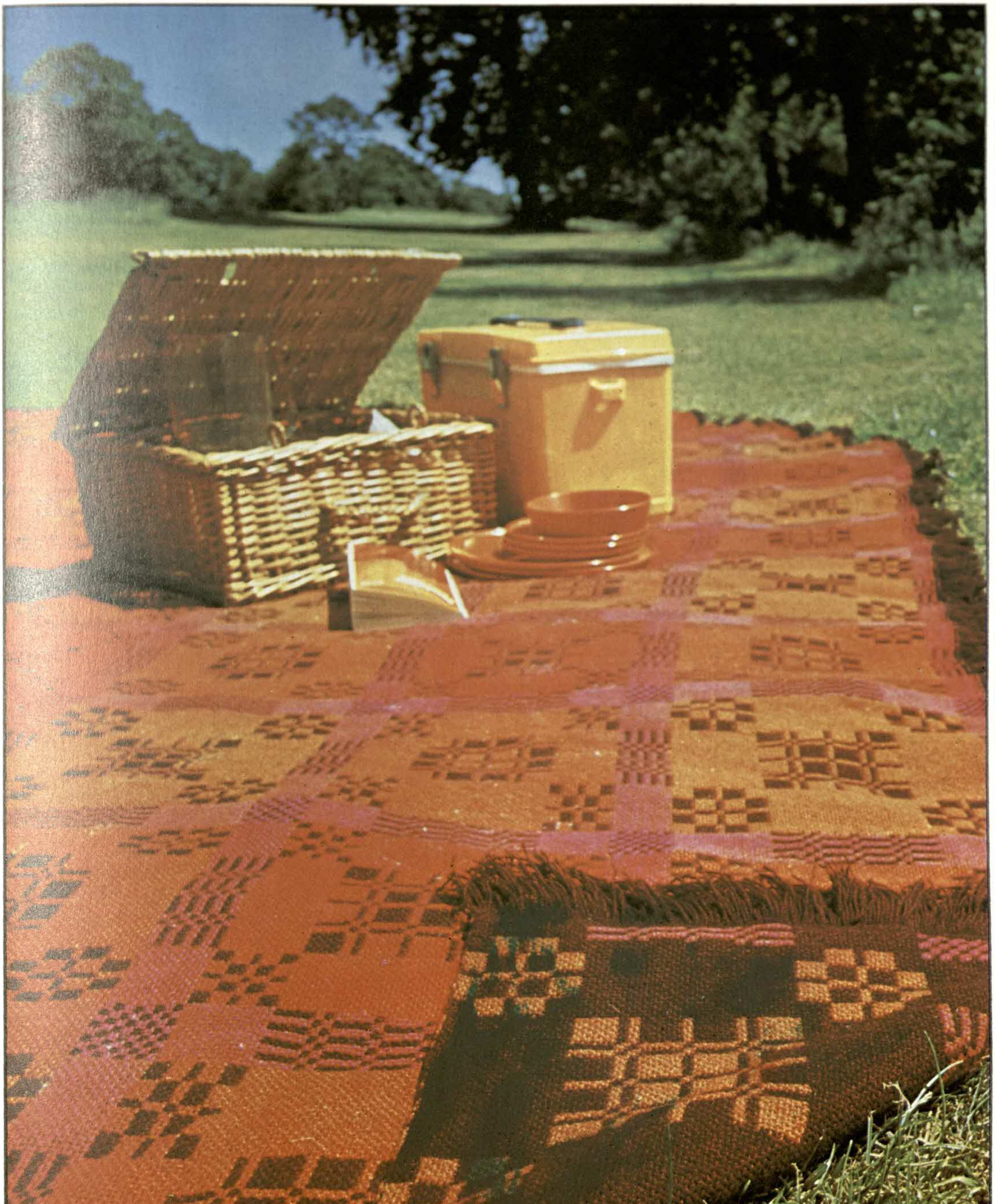
An interchange doublecloth is a fabric in which the two cloths exchange positions every now and again—the surface cloth becomes the back cloth and vice versa. The simplest interchange doublecloth can be woven on the basic draft (see fig.1). If a section of fig.1 is then followed by a section of fig.3, horizontal stripes of the two cloths will result. These stripes can be padded to make a series of ridges.

A basic doublecloth requires four shafts—two each for the plain weave of each cloth. Therefore it is necessary to have eight or more shafts for interchange doublecloths in which there is a pattern. The second and subsequent sets of four shafts introduce separate sections in which either the first or second cloths can be brought on top.

The simplest weave will give vertical tubes (fig.7). The next stage would be to introduce a counterchange area which would give a checker-board effect (fig.8). The way the threads interchange to create this effect is shown in fig.9.

The basic doublecloth can evolve into a very complex technique in which extremely intricate patterns can be developed from the interchange of the cloths and the use of colour and proportion in the two warps and wefts. The more shafts used the more sections that can be interchanged. Fig.10 shows a sixteen-shaft doublecloth which gives a stepped effect. The well-known Welsh blankets are produced using an interchange doublecloth. The patterns they show give some idea of some of the fascinating designs that are possible.

Right: the reversible quality of Welsh blankets is due to the doublecloth weave.



Geoffrey Frosh

How to make miniature dolls

The time required to make miniature dolls for a doll's house is not necessarily in proportion to the size of the dolls. A 15cm (6″) doll may take just as long to make as a large doll. Many different materials are involved and most of the sewing must be done by hand. Meticulous care and accurate detail are part of the joy of making miniature dolls, however, and much satisfaction is to be gained from creating the right effect.

Trace patterns are given overleaf for clothes for a family of dolls—mother, father, girl, boy and governess. The patterns do not include seam allowances and 6mm (¼″) must be added all round. The dolls vary slightly in height—from approximately 15cm (6″) for the children to 17.5cm (7″) for the father.

The clothes patterns should only be regarded as a basic guide and each pattern should be checked against the completed body for which it is intended before cutting out to ensure a correct fit.

The dolls are dressed in clothes which were fashionable at the turn of the century. Patterns can easily be adapted to suit other household characters or to make clothes of a different period. By using the same basic pattern shapes, choosing different fabrics and trimmings, altering the skirt lengths and adding a variety of detail, you can create an entire collection of delightful miniature people.

Materials

These dolls are extremely cheap to make and dress since they only involve inexpensive materials, all of which are used in small quantities.

The bodies are made from pipe cleaners, cotton wool, bias binding, pink cotton fabric or felt for the head and scraps of knitting wool for the hair.

The clothes can be made from any scraps of fabric you may already have but it is preferable to use closely woven, non-fraying fabric which gives a neat finish and involves less work. If you use patterned fabrics, try to choose small patterns that are in proportion to the size of the dolls.

Felt is particularly suitable for clothes such as jackets and hats, as well as for trimmings since it does not fray. Narrow ribbon and lace are useful for collars, touches of decoration and binding edges.

To make the basic body

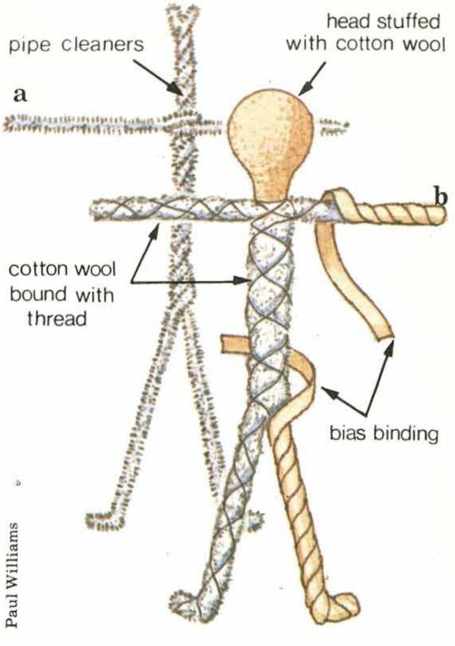
You will need:

Three pipe cleaners.
Cotton wool.
Pink bias binding.
Small piece of pink felt or cotton fabric for the head.
Matching thread.

☐ Join the pipe cleaners together as shown in fig.1a. You can adjust arm and leg lengths by making an extra twist or two round the trunk.

☐ Following fig.1b, pad pipe cleaner 'skeleton' with cotton wool and wind sewing cotton round it to keep it in place.

☐ Wind pink bias binding round the legs, arms and trunk in overlapping layers as shown in fig.1b and catch stitch in places to hold the layers in position, particularly at the ends of the arms.



Paul Williams

1. *Making the basic doll's body.*

The remarkably life-like appearance of this delightful family of miniature dolls owes its success to careful attention to detail. Designed by Ilse Gray.

Geoffrey Frosh

The head. Make a paper pattern for the head using the trace pattern given and cut out the two head pieces in pink felt or cotton fabric.

☐ With right sides facing, sew round the edges, leaving the neck edge open. Trim the seams and turn right side out.

☐ Stuff the head with a little cotton wool, place over the top of the pipe cleaner ends, and continue to stuff until you have obtained the right head shape (see fig.1b).

☐ Catch stitch the neck edge neatly to the body all round.

The mother

☐ Make the body as described. To emphasize the S-line of the Edwardian dress, pad the bust and seat with extra cotton wool.

Dress. Cut out paper patterns for the skirt, bodice and sleeves from the trace patterns given. Check the length and width against the doll.

☐ Lay all the patterns on a double thickness of fabric and cut out.

☐ With right sides facing, sew front bodice pieces to back bodice at shoulders and sides. Turn right side out.

☐ Wrap a short piece of broderie anglaise trimming round the neck of the doll to form a high collar. This can be trimmed to 12mm (½″) at the sides and back of the neck, but should be wide enough at the front to make a blouse front under the V-neck. If the trimming is already too narrow for this, sew a piece of white ribbon to the front of the doll's body before putting on the collar.

☐ Put the bodice on the doll. Turn in the neck and front edges and sew to doll along the fold line.

☐ Pull the sleeves on to the arms, turn under the armhole edges and stitch to bodice.

☐ Sew one or two layers of narrow lace trimming on to cover this stitching line.

☐ To make the skirt, sew the back seam, right sides facing. Turn right side out.

☐ Put the skirt on the doll, turn in at the waist and sew to the bodice, starting at the front and gathering at the back to obtain a bustle effect.

☐ Turn up and sew the skirt hem and the sleeve edges (unless you have managed to cut these edges against a selvedge or have used a non-fraying fabric).

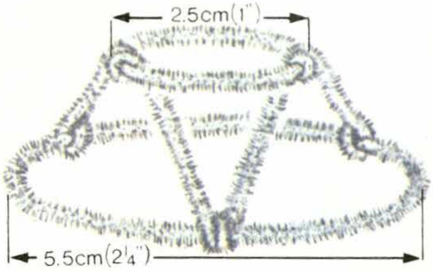
☐ To make the train, use a piece of ribbon or lace about 10cm (4″) square. Taper the ribbon or lace to 5cm (2″) at the top and 10cm (4″) at the bottom by folding in the sides by the required amount. Sew to the back of the skirt at the waist and sew down with a couple of stitches on either side of the train.

A waist petticoat could also be made using the skirt pattern. Add lace trimming to the bottom edge for a feminine touch.

Hair. Sew wool on to the head, starting at the top and working from the centre parting to the sides. Loop more wool loosely at the sides and finish with a bun on top of the head.

☐ Embroider features on face of doll.

Hat. Make a frame out of pipe cleaners with a 2.5cm (1″) crown and approximately 5.5cm (2¼″) brim (fig.2).



2. *Pipe cleaner frame for hat.*

☐ Cover the frame by winding brown ribbon or tape round and round the frame in layers lengthwise and catch stitch in place at intervals.

☐ Cut out two or three different sizes of coloured felt circles, preferably with pinking shears. Arrange them around the hat in layers, and sew on.

☐ The hat can simply be pinned on to the head, or, if young children will be playing with the doll, it should be sewn permanently in place.

The governess

☐ Make body as for mother.

☐ Make the skirt as for mother.

☐ Make blouse as for mother, but omit V-neck and make opening at back.

☐ Put skirt and blouse on doll, sew up back overlap of blouse, turn in sleeve edges and hem and sew.

☐ Trim sleeve edges with ribbon to indicate cuffs.

☐ Sew on a strip of felt at waist for a belt and embroider a buckle.

☐ Make the collar by wrapping a piece of white ribbon or binding and sewing down at back.

☐ Cut out a small felt bow and sew to collar at front.

Hair. Sew knitting wool on to head, working from front to back, and finishing with a neat bun at the centre back.

☐ Embroider features.

☐ Make a pince-nez by bending fuse wire to required shape and sewing on between eyes. Attach one side of frame to a piece of black wool or very narrow cord and tuck other end into belt.

The father

☐ Make the body as before, but slightly taller than that of the mother.

☐ Make paper patterns for trousers, jacket and sleeveless lining for front of jacket using trace patterns given. Check for size against body.

☐ Lay all the patterns on a double thickness of fabric and cut out.

Trousers. With right sides facing, join centre front and centre back seams.

☐ Fold so that front and back seams lie on top of each other, and join inner leg seams. Trim seams and turn right side out.

☐ Put trousers on doll and sew to body at waist, gathering in any surplus width. Turn in trouser hems and sew.

Jacket. With right sides facing, sew front pieces to back piece at sides and shoulders. Turn right side out.

☐ Pin lining to front of jacket on each side, with right sides facing, and sew along shoulders and front edges. Trim seams and turn lining to inside of jacket.

☐ Make back collar by binding edge with matching ribbon or jacket fabric. Press flat.

☐ Make shirt collar with a small length of white ribbon or bias binding turned in at the edges. Sew round the doll's neck, leaving a small gap at the front.

☐ Make a shirt front by sewing a piece of white ribbon to the front of the doll's body.

☐ For a cravat, tie a knot in black ribbon and sew in position.

☐ Put jacket on doll. If the jacket is too wide at the back, it can be taken in by making a tuck at each shoulder.

☐ Turn in the sleeve hems and sew.

☐ Turn back the lapels and catch stitch in place.

☐ Details, such as felt or bead buttons, pockets and a breast pocket with handkerchief, may all be added if desired.

Hair. Sew knitting wool to head, starting at centre front and working to sides and back. Begin with long stitches and build up with shorter ones.

☐ Embroider features, whiskers and moustache.

The girl

☐ Make body as before, but about 2.5cm (1″) shorter than that of the mother.

☐ Make paper patterns for bodice, skirt and hat using trace patterns given and check against doll for size.

☐ Lay them on double thickness of fabric and cut out.

Dress. With right sides facing, sew front bodice to back sections at sides and shoulders. Turn right side out.

☐ Turn in and sew neck edge.

☐ Put bodice on doll, turn in edges of back opening and join by overlapping and sewing down.

☐ Sew side seams of skirt, right sides facing. Turn right side out.

☐ Pin and sew skirt to bodice, taking large pleats as you go.

☐ Turn up and sew sleeve edges and hem.

☐ If the pleats stick out, sew down each pleat with a couple of small stitches.

☐ Trim sleeves and neck with narrow lace.

☐ Trim waist seam of skirt with narrow ribbon.

Hair. Sew long lengths of knitting wool from centre parting to sides and back, securing it at ear level.

☐ Embroider features.

Hat. With right sides facing, join edges of two circular hat pieces, leaving a small gap.

☐ Trim seam and turn right side out through gap. Turn in edges of opening and oversew them together.

☐ Gather at line shown on trace pattern to fit head. Press edge of brim. Trim gathering line with ribbon. Attach to head as for mother's hat by pinning or sewing in place.

The boy

☐ Make body as for girl.

☐ Make paper patterns for sailor's outfit using trace patterns given. Check against doll for size.

☐ Lay patterns for tunic and trousers on double thickness of fabric (preferably white for tunic and navy-blue for trousers) and cut out.

☐ Lay the patterns for hat and collar on a single thickness of navy-blue fabric and cut out. It is a good idea to make the collar in felt, to avoid turning in the edges. In this case, trim away the 5mm (¼") seam allowance from the paper pattern.

Knickerbockers. Make the trousers as for father. The only difference is that they reach to just below the knees.

☐ Sew knickerbockers to doll's legs, taking a tuck on the outside of each trouser leg and trim with a strip of blue felt or ribbon.

Tunic. Make tunic as for girl's bodice, but with the opening at the front.

☐ Trim collar with a thin strip of navy felt or narrow ribbon.

☐ Trim sleeve edges at wrist with two strips of navy-blue felt or narrow ribbon.

☐ Trim collar piece at the back and sides with a strip of white felt near the edge.

☐ Fasten collar piece at front by sewing to blouse at the point where the ties cross.

Hat. Gather the circle of fabric at the edge so that it fits the head, and flatten the crown.

☐ Sew a narrow band of felt round the edge of the opening, and sew this band to the head.

☐ Add two small strips of felt at one side of head.

☐ Stitch brim to head in one or two places to keep the crown flat.

Shoes

The shoes for all the dolls are made from felt, using the trace pattern given (no seam allowance is necessary).

The felt is sewn to the foot at front and back.

It is also possible to make shoes by winding sufficient masking tape round the foot to form the required shape and size. The feet can then be painted as desired and covered with clear nail varnish for a polished effect.

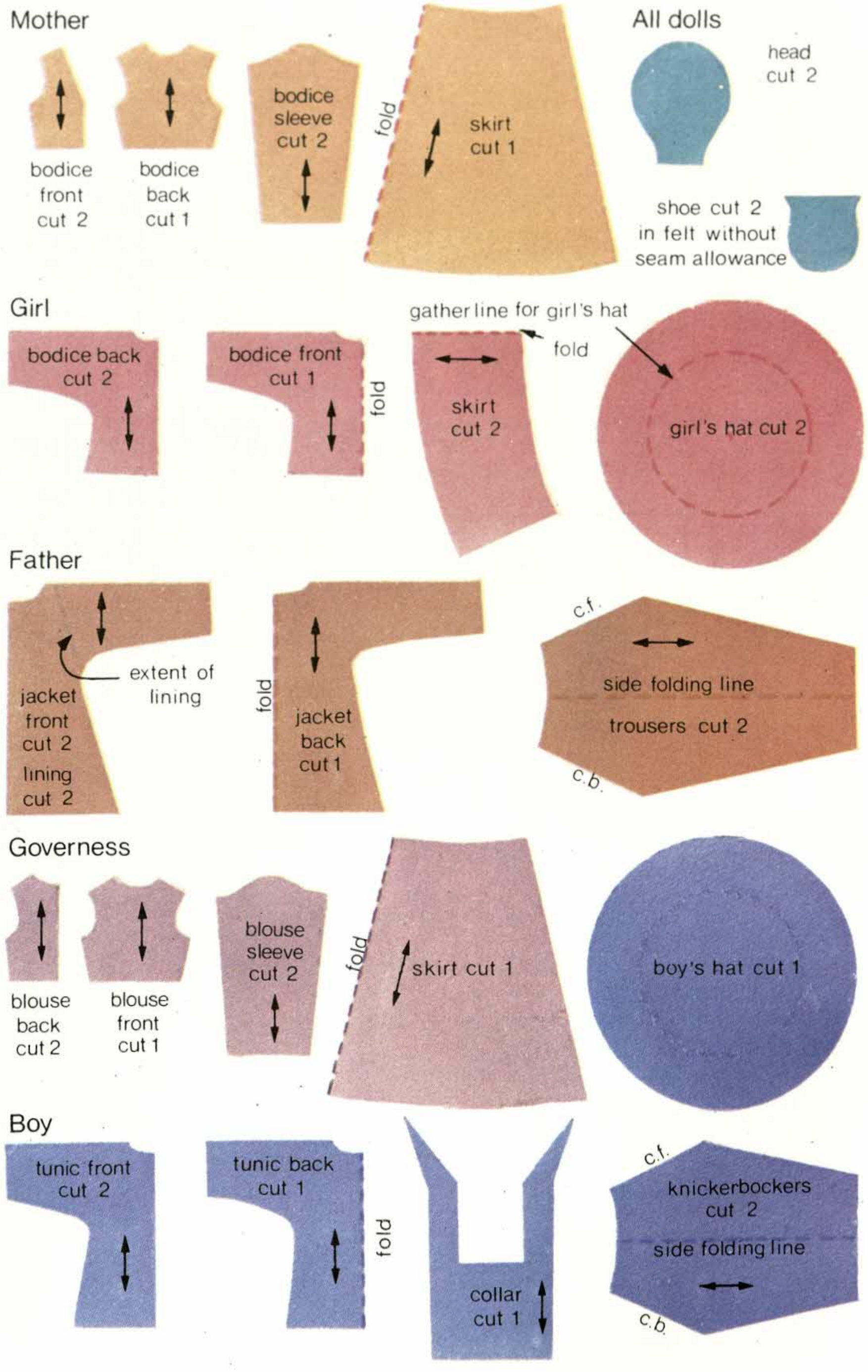
A piece of card shaped to the same size as the 'shoe' and stuck to the 'sole' will make the doll stand up better.

The dolls will also be more stable if you wrap soldering wire or lead foil round the feet before making the shoes. If making felt shoes, allow extra width when cutting them out.

Dog

A dog or cat can be made by winding wool round a pipe cleaner frame, occasionally catch stitching it in place. The ears and tail are made by winding wool round loops of wool of the required length. The eyes, nose and mouth are sewn on with black wool for the finishing touches.

Key to trace patterns Add 6mm(¼") seam allowance round all patterns



Paul Williams

American folk decoration

American folk decoration is typical of all folk art in that it developed in the hands of unskilled and semi-skilled people who were expressing their cultural traditions while trying to beautify their surroundings.

Because of their humble origins these designs have a spontaneity and simplicity which are universally appealing and can be readily reproduced by an amateur. The old motifs can be applied to innumerable contemporary artefacts and adapted to create original designs.

Surfaces to which designs can be applied include the traditional ones described here—wood, plaster, fabric. Alternatively, the past and present can be blended by the ornamentation of plastics and other synthetic materials with traditional motifs.

Origins

American folk decoration was based primarily on two settlements: the English and the German.

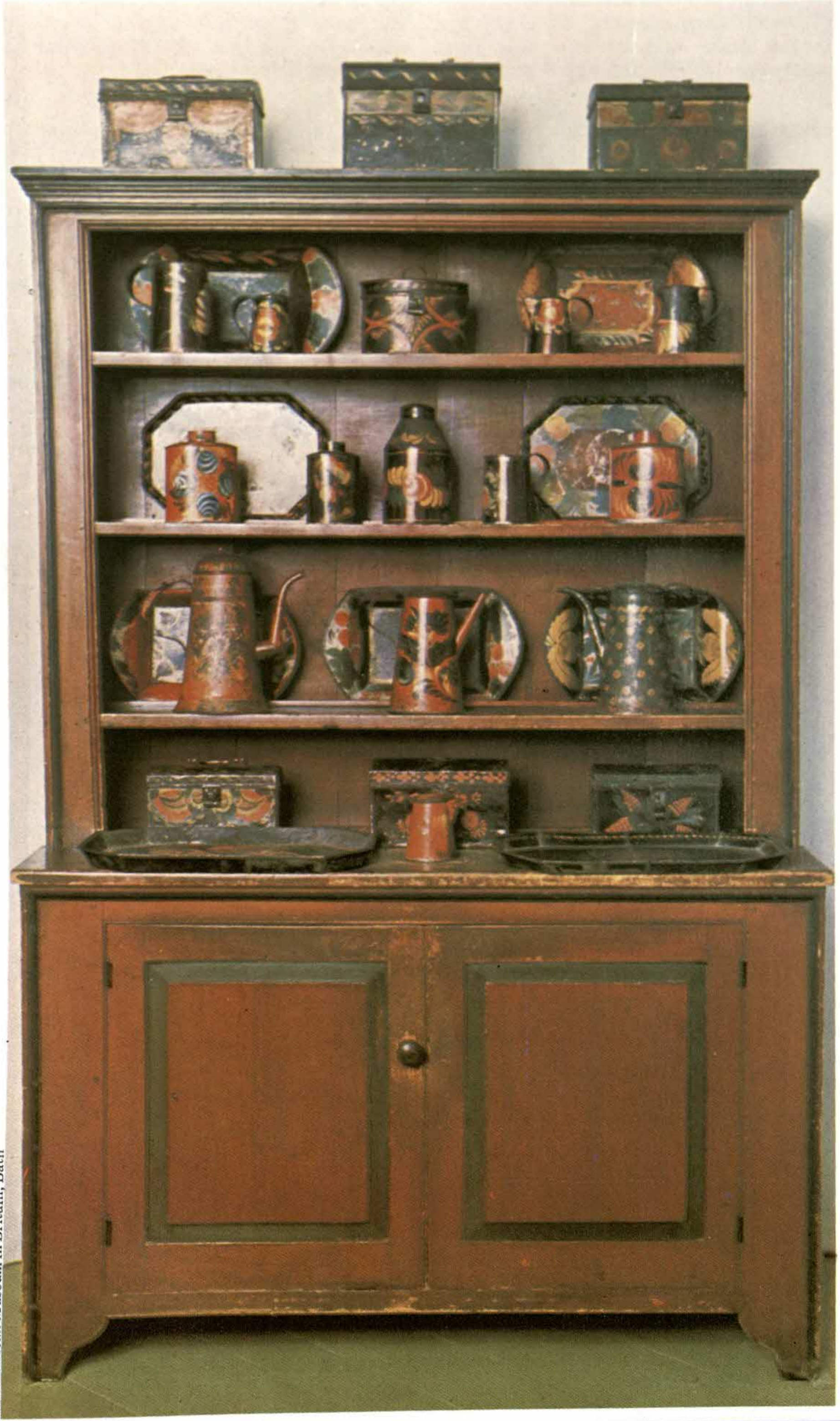
The Germans arrived in the New World with fully developed folk art traditions, enriched by centuries of simple rustic design. The colourful hearts and flowers which decorate Pennsylvania German furnishings are direct translations of their Middle European antecedents.

The English settlers on the other hand had few traditions of folk design. Some settlers had known luxurious surroundings but all who prospered longed for those signs of well-being which were associated with upper class English life—graceful furniture, hand-blocked wallpapers, oriental rugs and fine china. It was in an attempt to imitate these household luxuries using the simple materials and limited skills at the colonists' disposal that much of American folk art developed.

This chapter describes some of the uses and motifs of folk decoration in America and suggests how these designs may be used in contemporary craftwork.

Walls and floors

Stencilling is one of the simplest ways of producing a repeated design on walls (to imitate wallpaper) or floors (to imitate carpets). As stencilling came into vogue in America it was increasingly executed by itinerant artists who carried their stencil kits and designs from place to place. As they travelled on horseback they were unable to carry very much equipment, thus the tools of their trade were limited and at the same time fairly crude.



The American Museum in Britain, Bath

Left: the floral designs and motifs used on early American tinware often had their roots in European folk decoration.

Tools would usually consist of dry colours (generally made from local materials, including barks of trees, herbs and the local soils), brushes, stiff paper or leather stencils. Skimmed milk was used as a medium for mixing the colours for painting and was obtained at each of the farms where the itinerant craftsmen stopped to work.

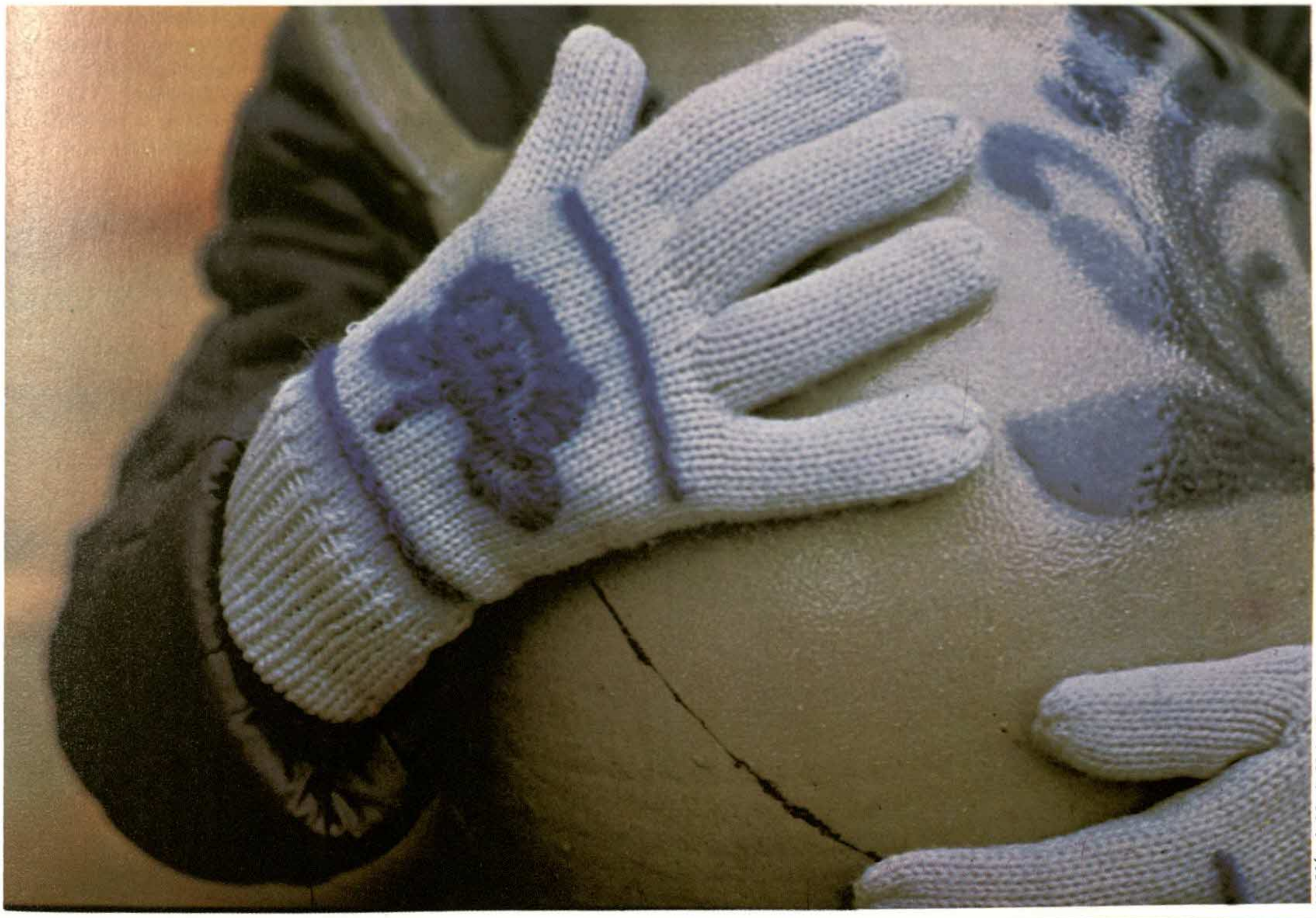
The usual colours used for wall stencils were reds, greens, yellows and black in various combinations which were applied on a whitewashed wall. Occasionally the walls would be tinted with pastel shades. The most popular stencil motifs were conventionalized leaf and flower forms with geometric borders.

There was also symbolism in the stencil designs used: hearts and bells meant joy; the eagle was the emblem of liberty; the pineapple was meant to denote hospitality; willow trees were thought to bring immortality. But the essential characteristic of all stencilled wall decoration was the clarity and simplicity of colour and design.

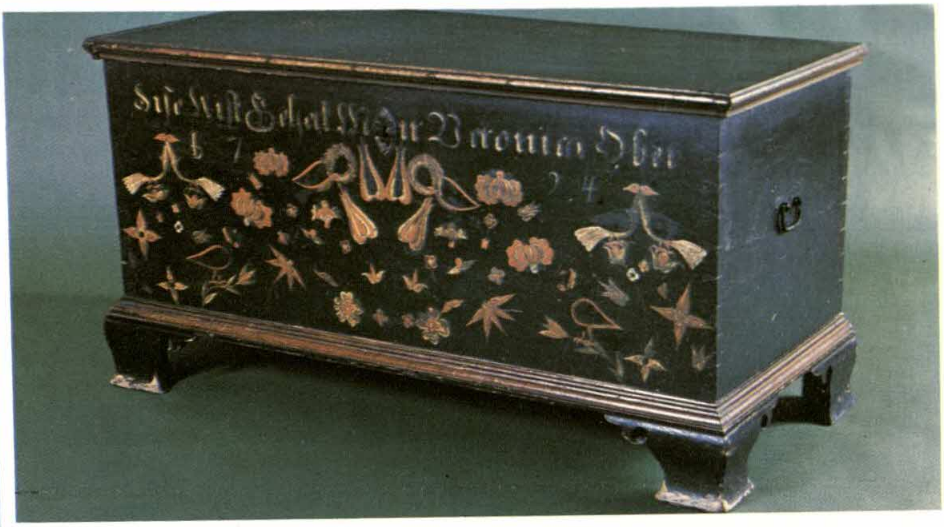
Marblized floors, painted to resemble marble with black and white veining, were also popular at this time. This technique is simple to copy today (Paint chapter 32, page 2034). Marbling was used not only on floors, but also on furniture and mantlepieces.

Above: locally made earthenware and slipware crocks were used by the early American settlers as a substitute for expensive, imported china. The decoration was normally a simple motif.

Below: the motif on the earthenware crocks was used as inspiration for the embroidered decoration on this child's woolly gloves. Other folk motifs can be used in a similar fashion.



100 Idées de Marie Claire/Reichle



Dower chests are a classic part of American folk tradition. Not only are they decorated with flowers and hearts but also the name of the girl to be married and the year of her betrothal.

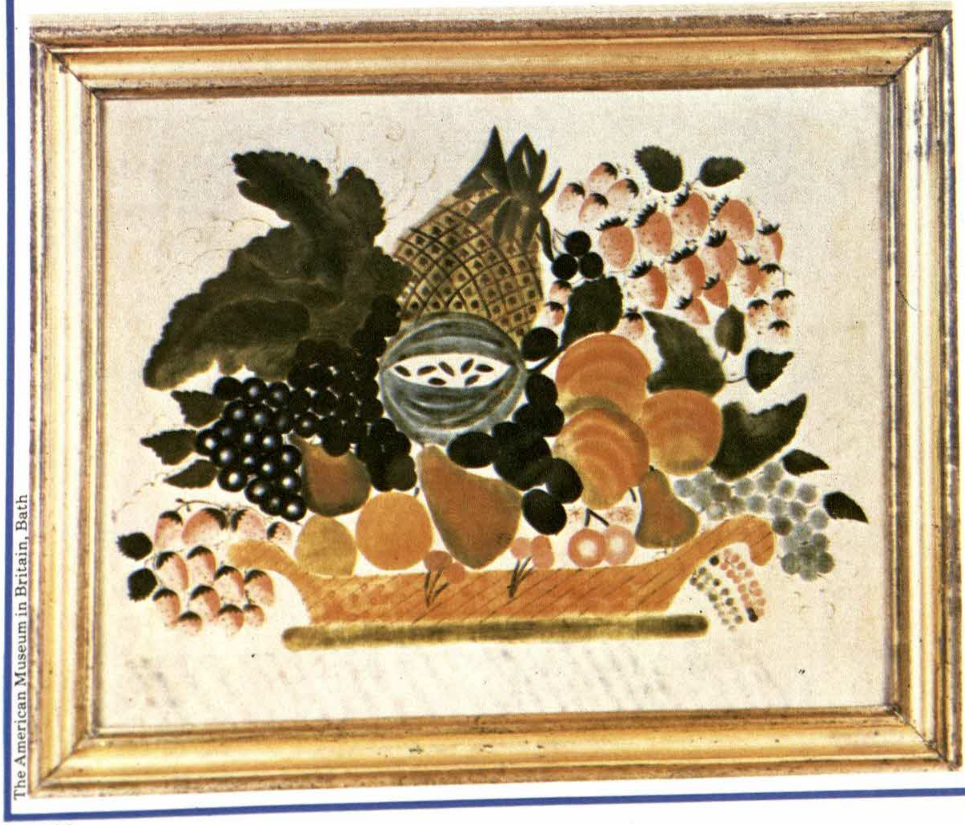
Freehand painting. From the early 18th century to the mid 19th century, freehand painting was popular for decorating murals and overmantels. These were painted with simple country scenes. This idea can be used in a similar fashion today, using acrylic paints or emulsion varnished with polyurethane.

Floor-cloths were another distinctive form of decoration in the earliest settlements. The antecedents of modern linoleum, these large areas of canvas were usually painted in bold geometric patterns inspired by oriental rugs.

Furnishing accessories

Some museums have fine examples of folk decoration which can provide contemporary designers with inspiration while illustrations of motifs in books can often be traced, enlarged and transferred on to other surfaces (Design know-how chapter 4, page 112).

Boxes for salt and spices, wooden spoon racks, trinket boxes, bellows and picture frames were all made in large quantities—some were handpainted others were stencilled. The designs generally featured flowers and fruit—in particular tulips and bunches of grapes.



This simple 'theorem' was painted on a velvet background using stencils. Each item of fruit was on a separate stencil and gradually an entire picture was built up by using a selection of stencils.

The American Museum in Britain, Bath

Painted tinware was another feature of the early American home. Tin jugs and pots were often substituted for decorated china and porcelain. These were decorated with brightly coloured flowers and borders using the japanning technique developed in Europe (Paint chapter 36, page 2218).

China and porcelain was generally imported in the early years. To supplement this, the poorer folk would use locally-made earthenware or slipware crocks. These were either a rich brown, decorated with orange and golden colours or grey with a blue design (Paint chapter 11, page 1244).

The design used to decorate the child's woollen gloves on the previous page is a good example of how old designs can find new applications.

Furniture

Among those who soon followed the first settlers to America were skilled builders and cabinet-makers who met the requirements of their employers not only by building their houses but also by constructing for them well-made furniture—chests of drawers, chairs, small chests, bible boxes, beds and numerous other items. These were often constructed of cheap wood and were made 'presentable' with brightly painted decoration.

It is a common fallacy that American folk decoration was entirely the work of amateurs for, more often than not, the decorative finish was applied by the cabinet-maker. Usually he was considerably more skilled in crafting wood than in figurative painting but, because of this, the naive style was retained.

It was partly due to travelling craftsmen that consistent folk styles and patterns developed. Each craftsman concentrated on his limited repertoire, taking it from village to village.

Later on, house and sign painters began to decorate furniture. Taunton chests of drawers soon became popular. These chests were decorated with a tree-of-life design, sometimes with added tulips or birds, on a brown or natural wood background.

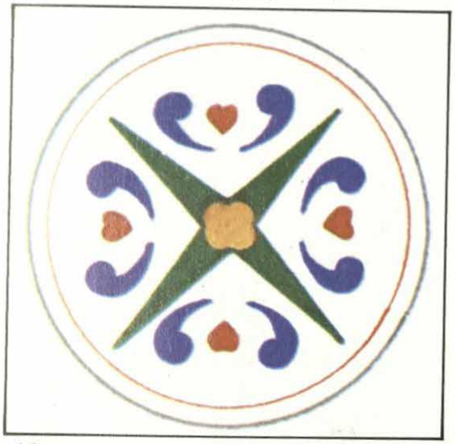
One of the classic designs associated with American folk art is the Pennsylvanian dower chest. This has its origins in mid Europe. Almost every Pennsylvanian girl received a dower chest when she reached marriageable age. The girl's name would form an integral part of the chest's decoration. The motifs were very often symbolic—unicorns were the fabled guardians of maidenhood and a tree-of-life and hearts were symbols of life and love.

Many of these motifs can be copied and used to decorate and renovate old travel trunks and tea-chests or toy-boxes.

The development of chair-making industries in the early 18th century generated the need for painted designs that could be quickly applied. Stencilling was the most suitable method.

Hitchcock chairs (wooden slat-backed chairs) were usually painted black and decorated with stencilled fruit and flower motifs.

Boston rocking-chairs are similar to Hitchcock chairs and are also known for their painted stencil decorations. Both are still available today. They can be found in junk shops or sometimes purchased new, ready for decoration (Stencils chapter 1, page 212).



Above: transfer pattern of barn motif. Below: it is still possible to see decorated barns in the Pennsylvanian countryside. The motif taken from the barn can be used to make a stencil to decorate the items of your choice.

Fabrics and needlework

In weaving and needlework folk motifs were used. Of these, patchwork motifs are the best known, and different patterns were circulated through the country.

Blue-and-white woven coverlets were also distinctly American and often incorporated one of the most popular of American folk designs, the eagle, which expressed the country's newly-won independence.

Stencilling was often used for decorating fabric, and in particular for fabric pictures. The designs stencilled on to cloth, generally velvet, are known as theorems. The theorem illustrated was painted with natural dyes.

Modern-day paints and fabric dyes put the use of folk motifs on fabric within the reach of everyone.

Barns

Pennsylvanian barns are fine examples of folk decoration. They are generally dark red or yellow with white geometric decorations which are often 1.5 or 2 metres (5 or 6 feet) in diameter.

The tradition of decorated barns originated with the decorated houses typical of Switzerland and Germany. Settlers from these countries could not ornament their new stone houses with painted designs so they maintained the traditions of their European ancestors by painting and decorating their wooden barns instead.

The farmers started painting barns in the mid 19th century. Soon after that, professional painters appeared who specialized in painting barns. The routes of these itinerant barn painters can often be traced by following the patterns they painted.

The designs were generally marked out with chalk and string or a large wooden compass and then painted. The number of circular decorations on the face of a barn varied from two to seven and often the gable ends were decorated.

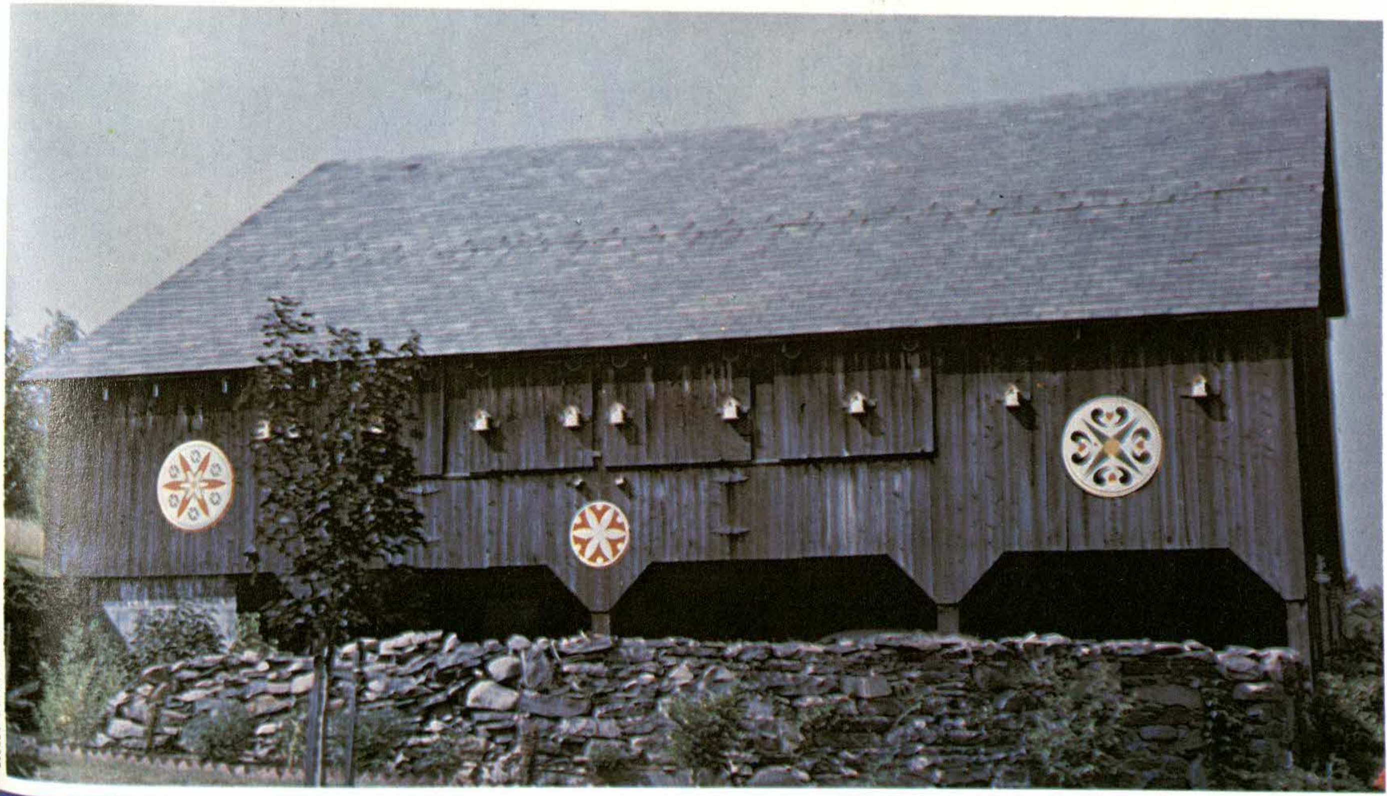
The structural lines of the barns were usually bordered with white bands. The designs on the barns generally had some significance. The six-lobed symbol was a conventionalized tulip. The star on the barns was a conventionalized pomegranate (the flower of Solomon's temple) which was symbolic of fertility and prosperity. Heart designs were also common. The symbols were sometimes considered to be 'hex' signs to scare away demons, to protect the barn from lightning and the animals from witches.

The signs and symbols on the barns can easily be used to decorate other items. Single out a specific symbol and make a stencil of it. You can then ornament almost any item with it (Stencils chapters 1, 2 and 3, pages 212-215; 240-243; 270-273).

Hearts and tulips on a bright background are attractive painted on kitchen tinware (Paint chapter 36, page 2218).

Incorporate the design in embroidery patterns or decorate fabric with a stencil design of a symbol (Printing chapter 14, page 1000).

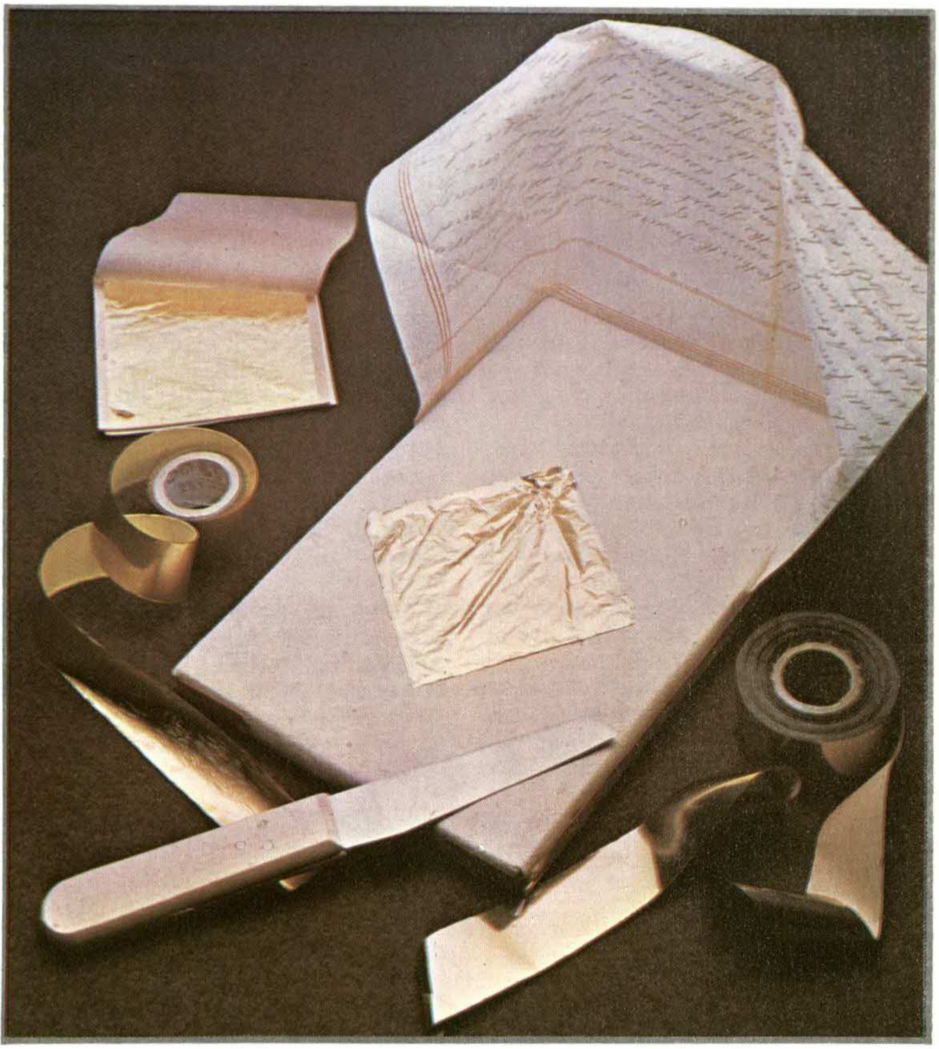
It is even possible to stencil the design on to cupboard doors to decorate your kitchen (Printing chapter 16, page 1055).



Roloc Color Slides

Gold tooling techniques

Leather 15


Paul Kemp

Materials for gilding in clockwise direction: book of gold leaf (top left), gilder's cushion with piece of gold leaf on it, gold foil, gilder's knife, gold ribbon on plastic backing.

Gold tooling is a craft traditionally associated with bookbinding, but it is also used to decorate other leather goods such as purses, jewelry boxes or the playing-card box, shown overleaf.

The technique of gold tooling involves using bookbinder's finishing tools (see Leather chapter 10, page 2134) to press gold leaf or a cheaper substitute, such as gold foil, on to the leather to make a gilded design.

Any of the soft skins—goat, sheep, kid or calf—and the harder leathers, such as cow-hide, can be decorated with gold tooling, as long as the skin is thick enough to 'give' slightly when the tool is pressed on it—about 1mm ($\frac{1}{16}$").

Gold tooling can be done on dyed or undyed leather, but if you intend dyeing the leather yourself, do this before applying the gold.

Gold

Several different types of gold can be used for gold tooling.

Gold leaf consists of very thin sheets of beaten gold bought in small books containing a number of 8cm (3¼") square sheets. This is the type of gold traditionally used by bookbinders, but there are other less precious varieties on the market which are also easier to use. If gold leaf is used it is necessary to have a gilder's cushion and a gilder's knife with which to handle the gold leaf.

Gold ribbon. This is made of particles of real gold on a plastic film backing. It can be bought from bookbinder's suppliers in reels of different widths.

Gold foil. This is similar to gold ribbon, but the 'gold' is actually made of aluminium and is cheaper to buy.

Applying the gold

The technique of gold tooling varies depending on what type of gold is used.

Gold tooling with gold leaf is a more lengthy procedure as the leather must be prepared to receive the gold.

If the leather has a grained surface, the area which will be gilded must be made smooth otherwise the gold will crack. This is done by first making the tooled impressions blind, ie straight on to the leather, using the heated finishing tools as explained in Leather chapter 10.

A mixture of beaten egg white and vinegar in the ratio 2 to 1 is then painted on. This is called glair and acts as an adhesive to bind the gold to the leather. It should not be painted on other than where the gold will go as it tends to discolour leather.

A small amount of petroleum jelly is then applied over the glair to hold the gold in place during tooling.

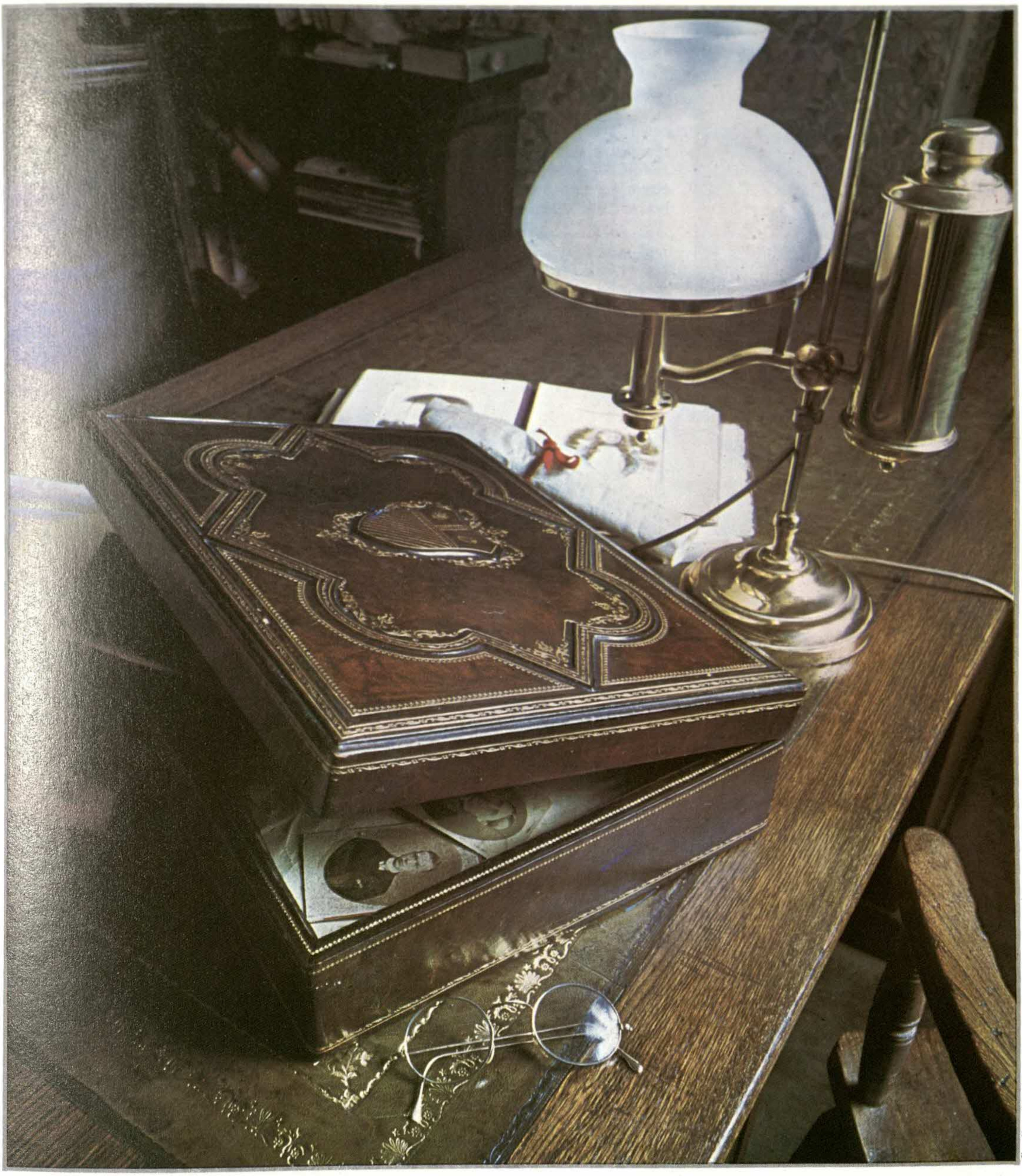
Each impression is gilded one at a time. A piece of gold leaf is very carefully removed from the book and placed on the cushion. A piece slightly larger than the area of one stamp is cut using the gilder's knife, and picked up on a piece of cotton wool with a very small amount of petroleum jelly on it. The piece of gold is placed on the leather ready for tooling, and then the heated tool is pressed on top. If the impression was first tooled blind, it will be visible through the gold, so that the tool can be placed exactly over the first impression.

The heat required to make a perfect impression varies from skin to skin, so test the heated tool on a scrap of the same leather first.

The tool should not dwell on the gold for long. One firm stamp should be made and the tool removed.

The heat of the tool and the glair will make the gold leaf adhere to the leather.

It often happens that the gold does not adhere properly, in which case it must be patched. Any particles of gold that have adhered can be left in place. More glair is painted on to the impression, the gold is applied in the same way as before over the impression, and the heated tool applied again, exactly over the last impression.



Geoffrey Frosh

This highly decorated leather box is an extremely fine example of the gold tooling technique.

After the gold tooling is finished a piece of cotton wool soaked in benzine or lighter fuel is gently wiped over the leather to remove any grease or loose particles of gold.

Gold ribbon and gold foil have an adhesive on the back which is activated by the heat of the tool. This means that leather does not have to be prepared with glair beforehand, nor is it necessary to smooth out the grain with blind tooling first.

The piece of gold ribbon or foil is cut to size, placed on to the leather shiny side up and held in position with adhesive tape. The dull side of the gold foil or gold ribbon which is placed next to the leather has the adhesive on it. The shiny side is the side with the plastic film on it which is pulled off afterwards.

When the gold is positioned over the leather, the heated tool is pressed over the foil. The heat transfers the gold from the plastic backing to the leather. The plastic backing is then removed.

Melvin Grey

The box

This box is covered with leather and then decorated with gold tooling.

You will need:

Materials

A wooden box—this can be bought from craft shops or you can use an old wooden cigar box or chocolate box.

Piece of sheepskin split (skiver) for covering the box—fig.1 shows how to estimate the amount needed for covering the base and lid.

Piece of felt for lining the box.

Piece of card.

Piece of paper for pattern.

PVA adhesive such as Evo-stik.

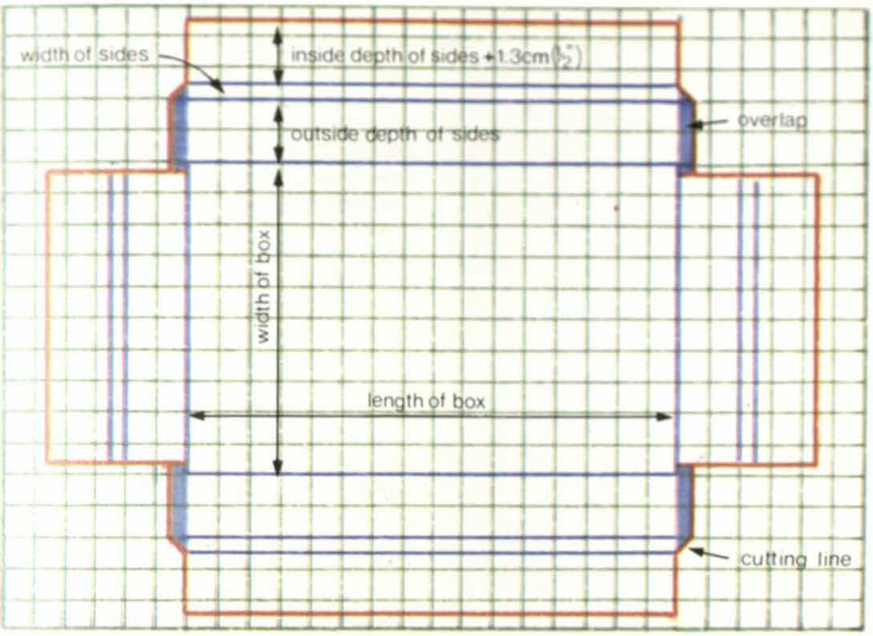
Chalk.

Gold leaf, gold foil or gold ribbon. If you are using gold leaf you will also need white of egg, vinegar, cotton wool, petroleum jelly and benzine or lighter fuel.

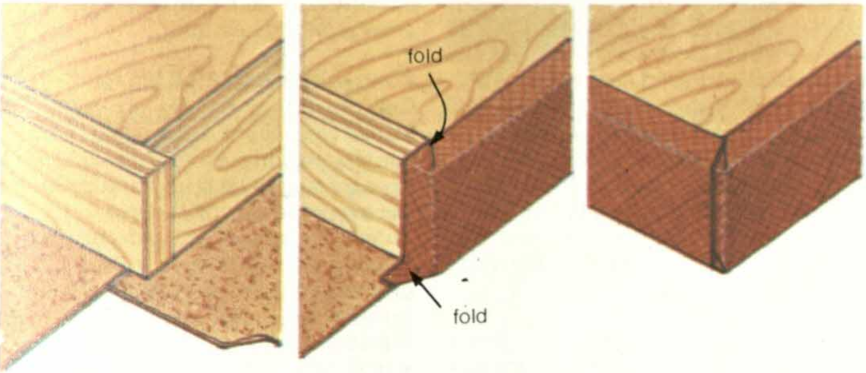
Left: the box is first covered with black skiver and the inside lined with red felt. The gold tooling decoration can then be applied, once you have chosen the design.

Below: any wooden box you may have at home could be transformed into this attractive card or jewelry box. Designed by Ray Wright.

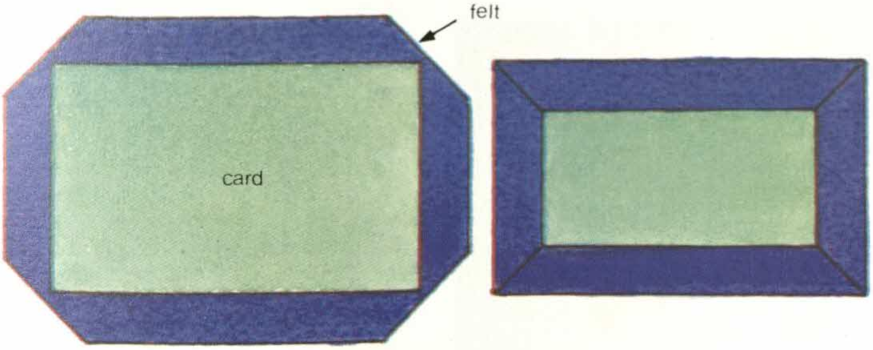
Paul Kemp



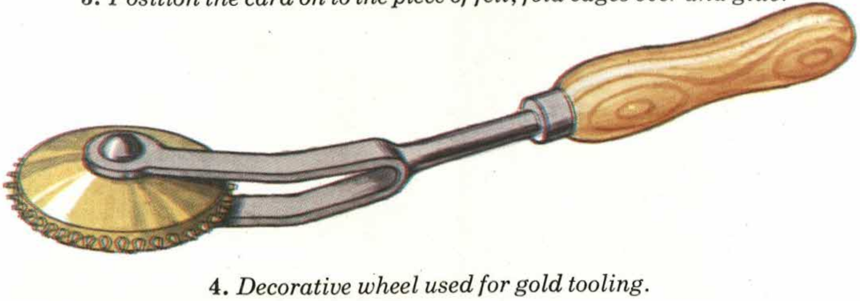
1. *Estimate the amount of leather needed for top and base as shown.*



2. *Fold the leather over the corners as shown here.*



3. *Position the card on to the piece of felt, fold edges over and glue.*



4. *Decorative wheel used for gold tooling.*

Paul Williams

Tools

Bookbinder's finishing tool or tools.

Burner on gas cooker or electric hotplate.

Pair of scissors.

Steel rule.

Vice.

Fine grade glasspaper.

Covering the box. Very thin leather—skiver—is used for covering the box to make it easier to fold the leather over the corners.

☐ Sand any rough edges on the box with fine grade glasspaper.

If possible, the box should be split into two halves—lid and base—covered and then put back together again. On the box shown here the hinges were removed from the base to split it into two halves. A piece of wood dividing the box into two sections was also removed and covered with leather.

☐ Following fig.1, place the top and bottom of box on the pattern paper and draw round.

☐ On to each edge, add a strip wide enough to cover the outside and inside of the box plus 1.3cm (½″) (see fig.1).

At the corners there is a small piece equal to the height of the sides and about 6mm (¼″) wide which tucks underneath. Note that on the short sides, the leather does not come up to the corner edges.

☐ Cut out the paper patterns.

☐ Check against the box that the paper patterns are the right shape and then place them on the flesh side of the leather, draw round and cut out using the scissors.

☐ Glue the bottom of the base and the top to the centre of each leather piece, on the flesh side.

☐ Next, glue the sides of the box and start moulding the side pieces up the sides, over the edge and down inside the box. The leather is very thin and slightly stretchy so can easily be worked over the corners (fig.2).

☐ When the top and bottom of the box are covered, the inside can be lined with felt. To do this, cut two pieces of card slightly smaller than the inside of the base and lid of the box and cover with felt (fig.3). Stick these inside the top and bottom of the box.

Applying the design. Each impression is prepared and gilded individually. The box shown here is decorated using decorative rolls (fig.4). Two were used to produce the dotted lines, and one decorative stamp to make the motifs in each corner. Make up your own design using the tools you have.

☐ Secure the box in a vice while applying the design, protecting it from pressure by wrapping in a cloth.

☐ Apply the gold following the instructions given previously. Practise the techniques explained on a scrap of leather first.

Pegged rag rugs

Yarn — rag rugs 2

An alternative to the hooked method of making rag rugs (described in Rag rugs chapter 1, page 2368) is the pegged technique, also known as the proddy, clippy or—in northern Britain—the stobby technique.

The basic materials are the same as for hooked rugs: rags or yarn and a hessian foundation. The difference is in the way the rags are inserted to form the pile.

Hooked rugs are worked with the right side of the hessian facing up. The rags are cut into long strips which are held below the hessian and a hook is used to pull them through to the right side in loops which form the pile.

Pegged rugs are worked with the wrong side of the hessian facing up. The rag strips are cut into tabs—pieces about 5cm (2″) long—and the ends of the tabs are pushed or prodded through the hessian from the top to form a cut pile on the right side.

Hooked rugs are generally more hard wearing than pegged rugs, but pegging is less physically tiring and designs can be more intricate than is possible by hooking. The amounts of rags required are approximately the same for both methods.

Pegs. The implement used for prodding is a round, pointed peg, usually made from wood, about 10cm (4″) long and 1cm (⅜″) diameter. You can buy the pegs ready made or you could make your own by shaping the end of a piece of dowel rod with a file. (Years ago the small horn of an animal or a fragment of an antler might have been used to make a peg.)

Designs

Designs for pegged rugs can be quite ambitious because the tufts of pile are inserted individually, and it does not make much difference to the ease of working whether successive tufts are in the same or different fabrics. (With hooked rugs, designs have areas of one colour because a series of tufts is made from one fabric strip.)

You could adapt a design for a latch-hooked or needlepoint rug, you could make your own design, or you can sometimes buy hessian specially printed with a design.

Cumbrian bull, designed by Denis Barker. The rug is made from rag strips which are prodded through a hessian foundation with a wooden peg.

Geoffrey Frosh

Your own design. The method you use for planning your own design depends on the type of design. Simple or pictorial designs can be sketched on paper and then enlarged to scale on the hessian foundation (see Design know-how chapter 4, page 112).

Use felt-tipped pen or chalk to draw the design on the hessian. If you are including any lettering, this should be drawn in mirror image because the rug is worked with the reverse side facing up.

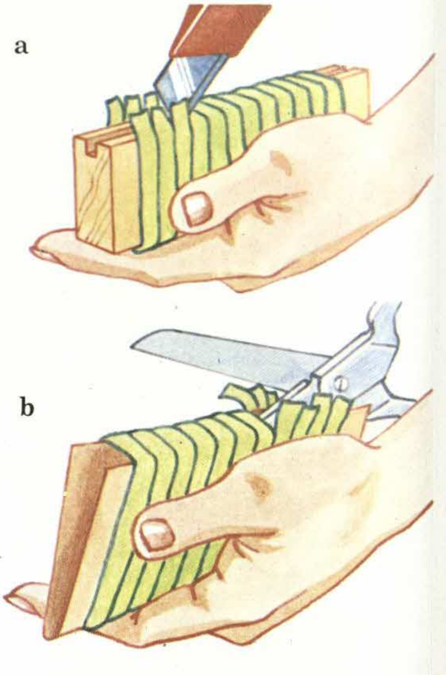
For intricate geometric and oriental-style designs you could work out the design on graph paper so that one square represents one double tuft of pile. On a double-pegged rug (the method which produces the closest pile—see box) each square would also represent two threads of the hessian foundation. On a single-pegged rug (the method which produces a looser pile) each square would represent four threads of hessian.

The paper design can then be used as a working chart because it would be too complicated and time-consuming to draw it on the hessian.

Preparing the tabs

Cut the fabric on the straight grain into strips about 1.2cm (½″) wide for double pegging or up to 2.5cm (1″) wide for single pegging, and as long as the available rags will allow.

To cut the strips into tabs, wind them round a piece of 12mm x 4cm (½″x 1½″) grooved wood and cut along the grooved edge with a handyman's knife (fig.1a). Alternatively, fold a piece of strawboard to 6.5cm (2½″) wide and cut along the open side with shears (fig.1b).

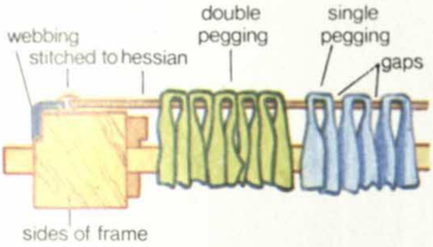


1a, b. *Cutting rag strips into tabs.*

Pegging the tabs

The hessian should be mounted in a frame as described for hooked rugs (Rag rugs chapter 1). If you are folding over the edges first, place the hessian in the frame with the raw edges facing up.

There are two methods of pegging—double, which produces the most hard-wearing pile because the tabs are tightly packed, and single, which is quicker to do but less hard-wearing because the tabs are more widely spaced. Fig.2 shows the two methods. Both forms of pegging are worked in rows across the width of the hessian, changing colours as necessary to fit the design, to form an even close pile.



2. *Double and single pegging.*

Sheep in the snow, by Denis Barker, was inspired by English Cumbrian scenery.

Barkers of Lanercost

Double pegging. Push the point of the peg through the hessian to make a hole in the position for the first tuft (fig.3).

☐ Following fig.4, fold the end of the first tab and push it through the hole with the peg. Use the fingers of your free hand to pull it half-way through.

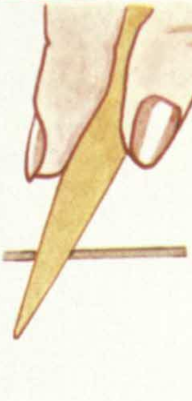
☐ Make a second hole with the peg two threads of hessian along the row (fig.5) and prod the other end of the tab through (fig.6). Use the fingers of your free hand to pull the ends of the tab on the underside evenly into place.

☐ Prod the end of the next tab into the second hole (with the first tab) and pull halfway through (fig.7). Make a third hole two threads of hessian further on and prod through the other end of the second tab (fig.8). Continue in this way along the row.

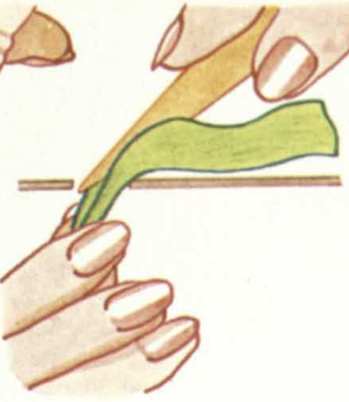
☐ Work the next and subsequent rows in the same way, leaving two threads of hessian between each row.

Single pegging. This gives a less dense and also less hard-wearing pile. The tabs can be up to 2.5cm (1″) wide.

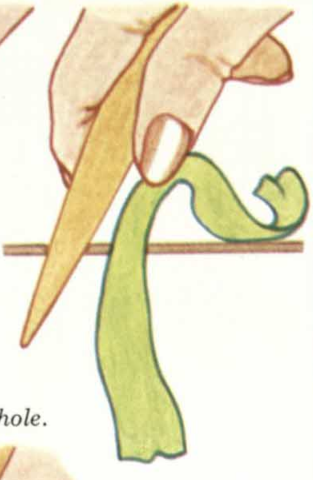
☐ Insert the first tab as described for double pegging. Insert the following tab as for the first one, but leave two threads of hessian between each tab.



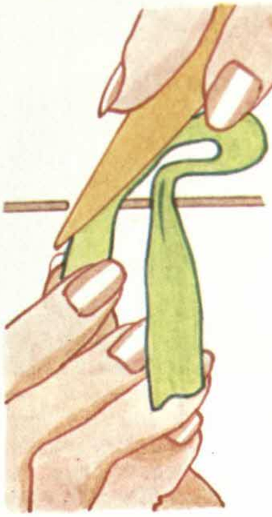
3. *Making a hole.*



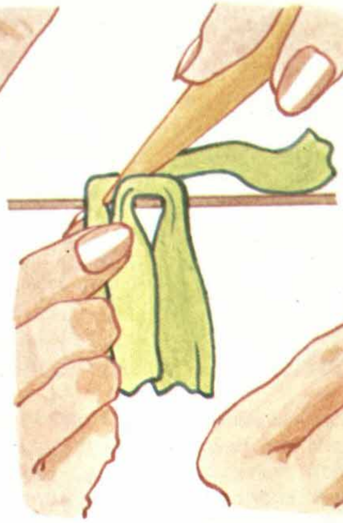
4. *Inserting tab.*



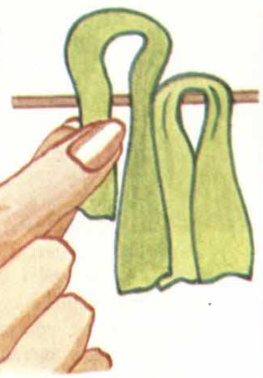
5. *Second hole.*



6. *Completing tab.*

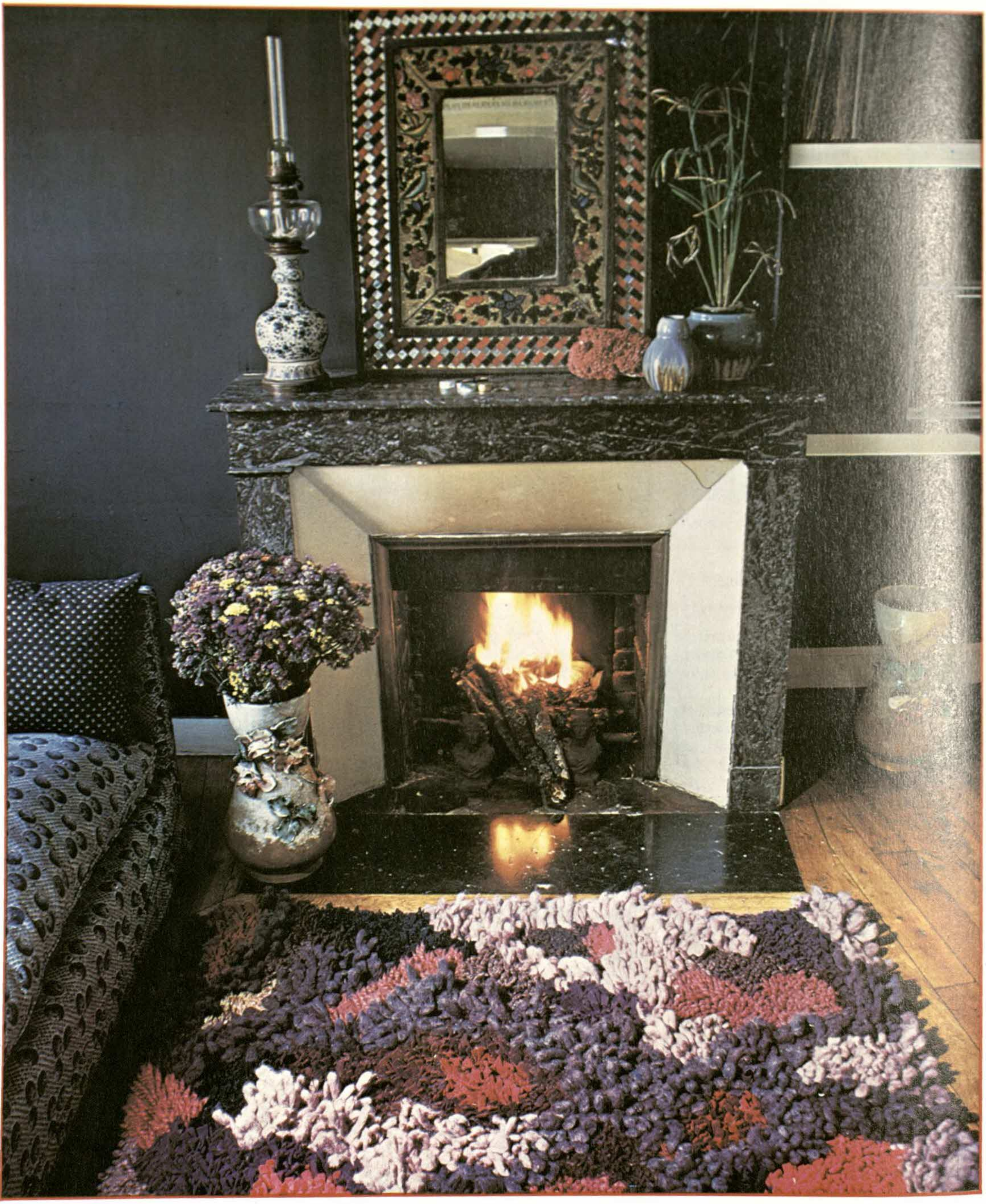


7. *Second tab.*



8. *Completing second tab.*

Coral Mula



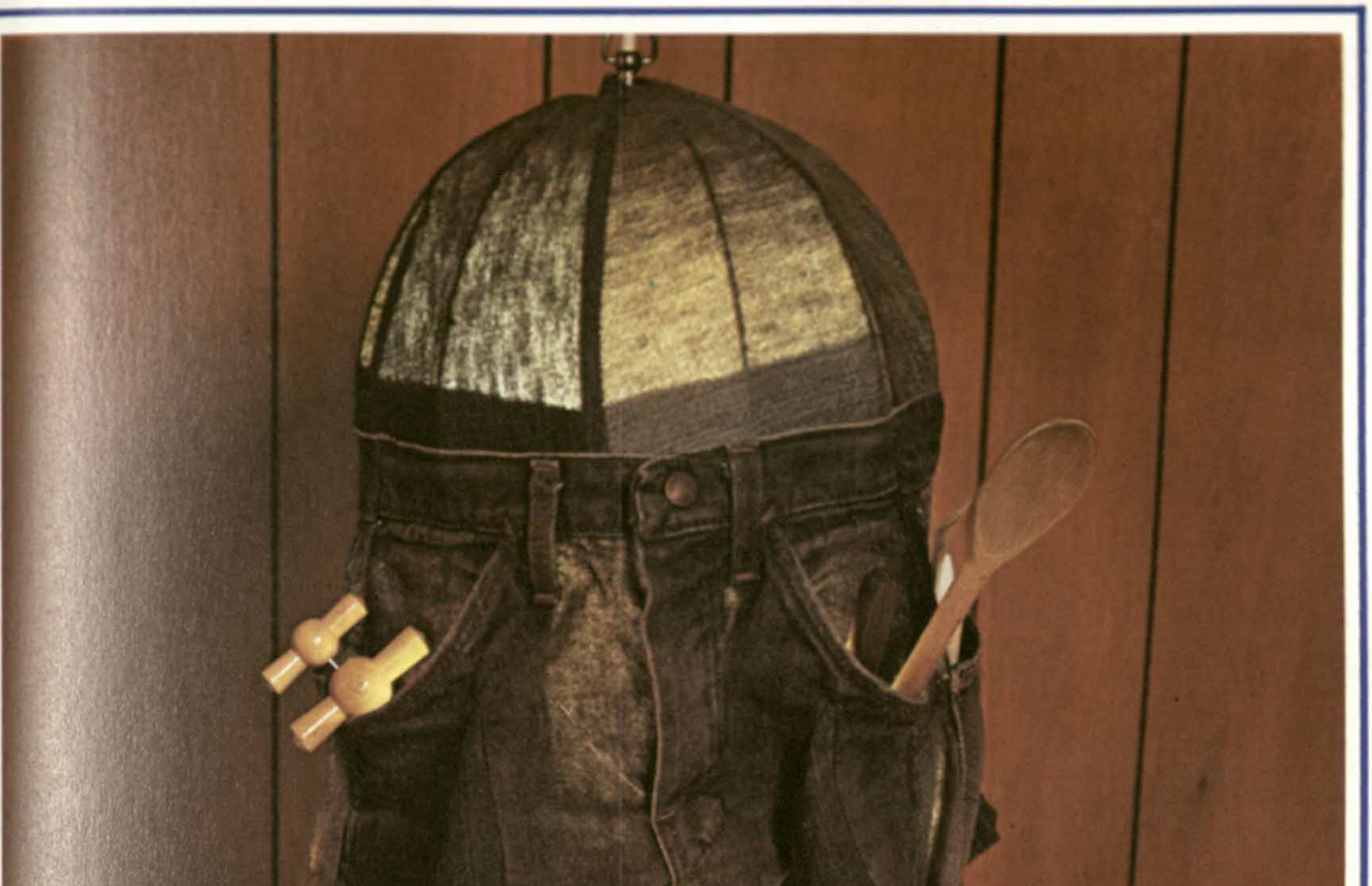
100 Idées de Marie Claire/Boys

A mixture of unusual yarns, including various rug and slub weaving wools with other yarns recycled from old knitted garments, make a colourful, hard-wearing rug. The pile length was varied to add interest to the texture.

Care of rugs

Both pegged and hooked rugs may be vacuum cleaned. Pegged rugs, in particular, tend to shed fibres from the cut edges for a few weeks after they are first made, but the frayed edges usually add to the attractive effect.

The rugs may be washed with carpet shampoo or you could follow an old custom and simply lay them flat outside for a few minutes in light rain—when shaken dry the rugs revive beautifully.



Peter Heinz

Creative ideas 86

Denim lampshade

Here is a rather bizarre lampshade which has been cut out and sewn from an old pair of denim jeans.

This original idea is especially suitable for a kitchen.

With a powerful light bulb inside, the finished lampshade will deliver an area of strong, direct light on to a work surface. The Tiffany-style denim lampshade also has 'pockets' which are strong enough to hold a miscellany of culinary utensils.

An unlined, panelled cover is made from wedge-shaped sections, which are cut out from the lower leg part of a pair of jeans. For instructions on making a panelled cover see Lampshades chapter 3, page 1214.

The 'skirt' of the shade is made from the top section of the jeans, which is hemmed, fitted and oversewn on to the covered frame.

Make sure that you sew the 'skirt' of the shade securely and with strong thread such as buttonhole thread, so that the 'pockets' can take the weight of culinary utensils.

Sheaths for knife blades can be made from scraps of denim.

Designed by Head Work, this denim shade is supported by a frame with a 25cm (10") diameter.

Picture mosaics with stamps

Artists, both amateur and professional, have been making mosaic pictures from stamps ever since the postage stamp was invented. One of the most famous stamp mosaicists of the 19th century was a Monsieur Desseignes who exhibited his work in the shop of a stamp dealer in Paris. There were many stamp artists elsewhere at that time who were just as talented though less well known. Many of their pictures have survived but, unfortunately, most of them are in private collections.

Stamp artists are very rare today, and anyone who takes up this fascinating craft can be assured of embarking on something very unusual as well as interesting. Stamp mosaics make delightful and original greetings cards, place mats and lampshades, as well as pictures.

Materials

Stamps. Before starting on any stamp mosaic, collect as many used stamps of as many different colours as you possibly can. It is a good idea to join a stamp club if this craft becomes a full-time hobby. Look in the classified advertising columns of newspapers for the stamp offers which appear frequently.

Remove the stamps from their envelopes or cards by floating them in water until they peel off easily. Dry and flatten the stamps at the same time by pressing them between two sheets of blotting paper.

Sort out the stamps according to their predominant colour and store them in cardboard boxes (which should be small and flat), a different box for each colour. Keep multi-coloured stamps in a separate box.

Backgrounds. The background you choose for your stamp picture can either be rigid or limp; rigid backgrounds, such as mounting board and Bristol board, are easier to frame than thin paper such as white drawing paper or Ingres paper. (Desseignes used porcelain objects for his backgrounds, generally either plain white plates or plaques.)

Tools. To cut up the stamps to the very small size required for most mosaics, you will need a sharp pair of embroidery scissors and the smallest size of craft knife you can buy, such as an X-acto knife.

A school or college dissecting kit, such as is used by biologists, contains useful tools for stamp cutting. You can buy a kit from any laboratory supplier. It includes: a pair of tweezers which can be used for picking up the cut mosaic piece and positioning it; a dissecting needle which can be used for pushing about and repositioning pieces of the mosaic which have been wrongly placed; a flat spatula which can be used to hold down stamps while very small pieces are cut from them; and a lancet which can be used for cutting the stamps. (Do not allow children to use a lancet however: it is extremely sharp and could therefore be dangerous.)

Adhesive. Use PVA adhesive, such as Clam 7, thinned with water. Apply to the back of the stamp you wish to stick down with a fine water-colour paintbrush. Do not mix up more adhesive than you will use in one session, as it dries very rapidly. To stop the adhesive getting on to your hands or the picture, use a waste pad of paper (on which to apply the glue to the stamp) whose leaves can be torn off one by one and thrown away as soon as they have been used as a pasting surface.

Using colours

Part of the fascination of 'painting' in stamps lies in the choice and balance of colours. Although every colour can be found in stamps, some colours are more difficult to find than others and you may have to use a fairly rare stamp for exactly the right shade for a particular part of your design, especially for small details such as a necklace or the gold star on the unfinished picture of Lord Nelson shown.

Another advantage of using stamps to make pictures is that their colours are fast and will not fade. Something of lasting beauty can be created from today's commonplace ephemera.

Touches of water-colour are useful for brightening up parts of a picture: used sparingly, water-colour can be an effective addition to a stamp picture.

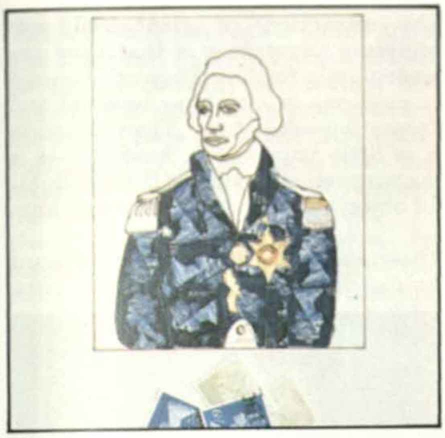
Making a stamp mosaic

It is essential that you know exactly the position of the stamps and the kind of composition you want before you start pasting down the stamps, since it will be very difficult to change their position once they are stuck to the background. In order to avoid any mistakes, make an accurate master drawing of the picture you intend to make on a piece of tracing paper.

Do not make your first picture too large if you are using very small pieces of cut stamps: one about 10cm (4″) square is a good size with which to

Very fine texture and shading variations can be obtained by careful cutting and grading of stamps.

Melvin Grey



Steve Bicknell

Half-finished portrait using new stamps.

begin. However, if you are using stamps full-size to make a pattern similar to that in the large picture below, they look more effective when covering a large area.

Cut the stamps to show that they are stamps and not simply pieces of coloured paper: there is no point in trying to disguise the raw material of the picture.

☐ Make a master drawing of the picture as already described. It must include every essential detail, including the position of the frame if you wish to have one around the picture. It should look like a cartoon for a stained glass window, with the whole picture composed of different sections, each clearly marked off from the others and each intended to be filled with stamps of a different colour or two shades of the same colour. The uncompleted part of the Lord Nelson portrait shown illustrates this.

☐ Transfer the drawing, using carbon paper, on to the background of the mosaic. Make notes on the tracing paper about the colours you want to use for each section.

☐ To cut out the pieces of the mosaic, start with the biggest block of colour and check that you have enough stamps of that colour to fill it. Small details, such as buttons, can be superimposed on the main block of colour afterwards. Lay the master drawing on top of a stamp of the right colour.

☐ Trace the outline you wish to cut through the tracing paper on to the stamp, using a hard pencil.

☐ Remove the tracing paper from the stamp—the traced line should show on the stamp. Emphasize this line by going over it with a fine black pen.

☐ Cut round the line on the stamp, lay the cut piece face down on a waste pad of paper and apply thinned glue as already described. Pick it up with the tweezers and position it. Rub your finger over it to make sure it sticks to the background.

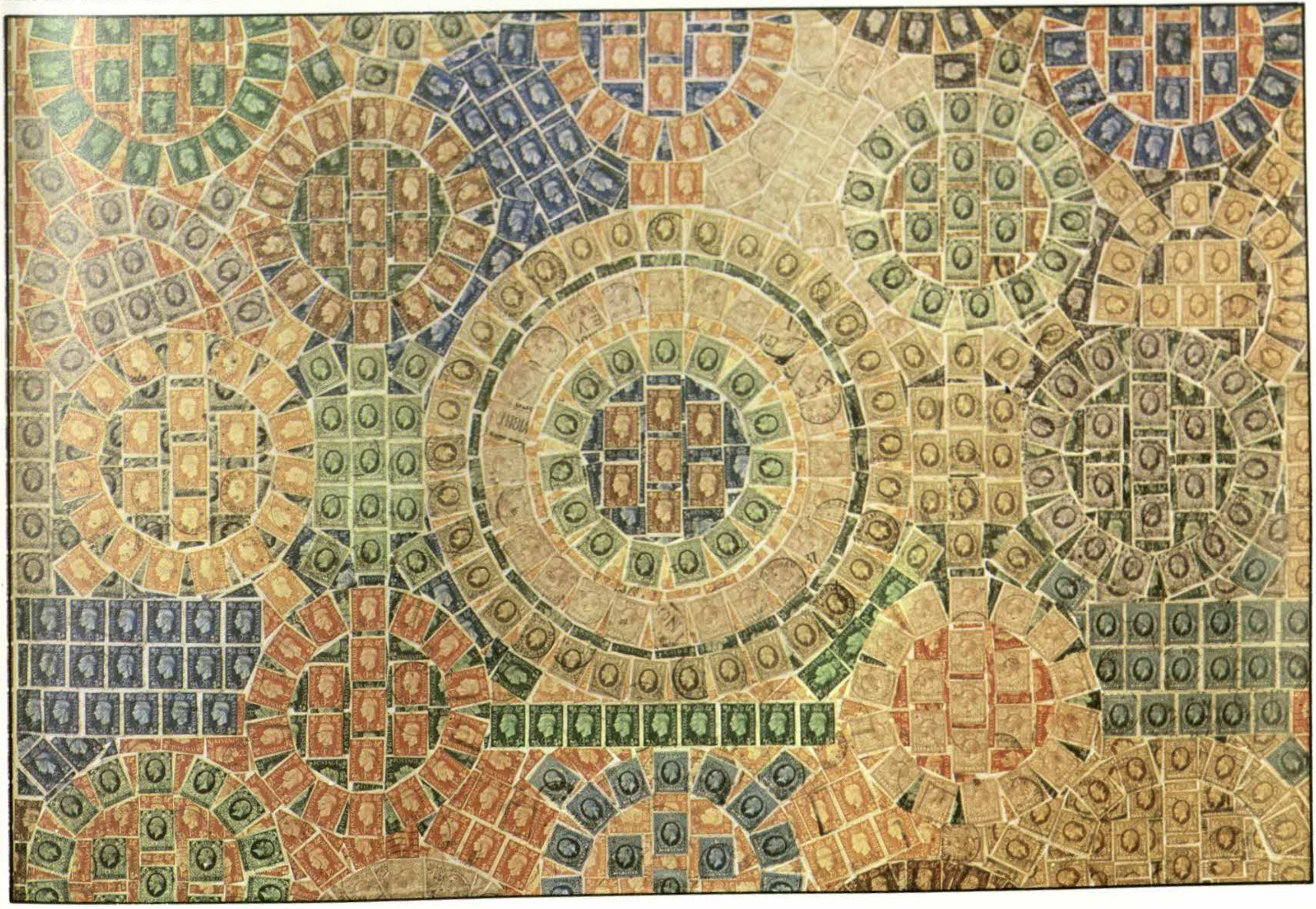
Steve Bicknell

Tiny stamp strips used to make flowers.

☐ Repeat the process with all the stamps, filling in one section of colour at a time, from the largest to the smallest sections, and leaving small details until the last.

☐ Put in any necessary lines or tiny details with water-colour.

A very fine mosaic picture, made from old stamps.



Paul Kemp

Picture mosaics with stamps

Paper 62

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Materials

Stamps. Before starting on any stamp mosaic, collect as many used stamps of as many different colours as you possibly can. It is a good idea to join a stamp club if this craft becomes a full-time hobby. Look in the classified advertising columns of newspapers for the stamp offers which appear frequently.

Remove the stamps from their envelopes or cards by floating them in water until they peel off easily. Dry and flatten the stamps at the same time by pressing them between two sheets of blotting paper.

Sort out the stamps according to their predominant colour and store them in cardboard boxes (which should be small and flat), a different box for each colour. Keep multi-coloured stamps in a separate box.

Backgrounds. The background you choose for your stamp picture can either be rigid or limp; rigid backgrounds, such as mounting board and Bristol board, are easier to frame than thin paper such as white drawing paper or Ingres paper. (Desseignes used porcelain objects for his backgrounds, generally either plain white plates or plaques.)

Tools. To cut up the stamps to the very small size required for most mosaics, you will need a sharp pair of embroidery scissors and the smallest size of craft knife you can buy, such as an X-acto knife.

A school or college dissecting kit, such as is used by biologists, contains useful tools for stamp cutting. You can buy a kit from any laboratory supplier. It includes: a pair of tweezers which can be used for picking up the cut mosaic piece and positioning it; a dissecting needle which can be used for pushing about and repositioning pieces of the mosaic which have been wrongly placed; a flat spatula which can be used to hold down stamps while very small pieces are cut from them; and a lancet which can be used for cutting the stamps. (Do not allow children to use a lancet however: it is extremely sharp and could therefore be dangerous.)

Adhesive. Use PVA adhesive, such as Clam 7, thinned with water. Apply to the back of the stamp you wish to stick down with a fine water-colour paintbrush. Do not mix up more adhesive than you will use in one session, as it dries very rapidly. To stop the adhesive getting on to your hands or the picture, use a waste pad of paper (on which to apply the glue to the stamp) whose leaves can be torn off one by one and thrown away as soon as they have been used as a pasting surface.

Using colours

Part of the fascination of 'painting' in stamps lies in the choice and balance of colours. Although every colour can be found in stamps, some colours are more difficult to find than others and you may have to use a fairly rare stamp for exactly the right shade for a particular part of your design, especially for small details such as a necklace or the gold star on the unfinished picture of Lord Nelson shown.

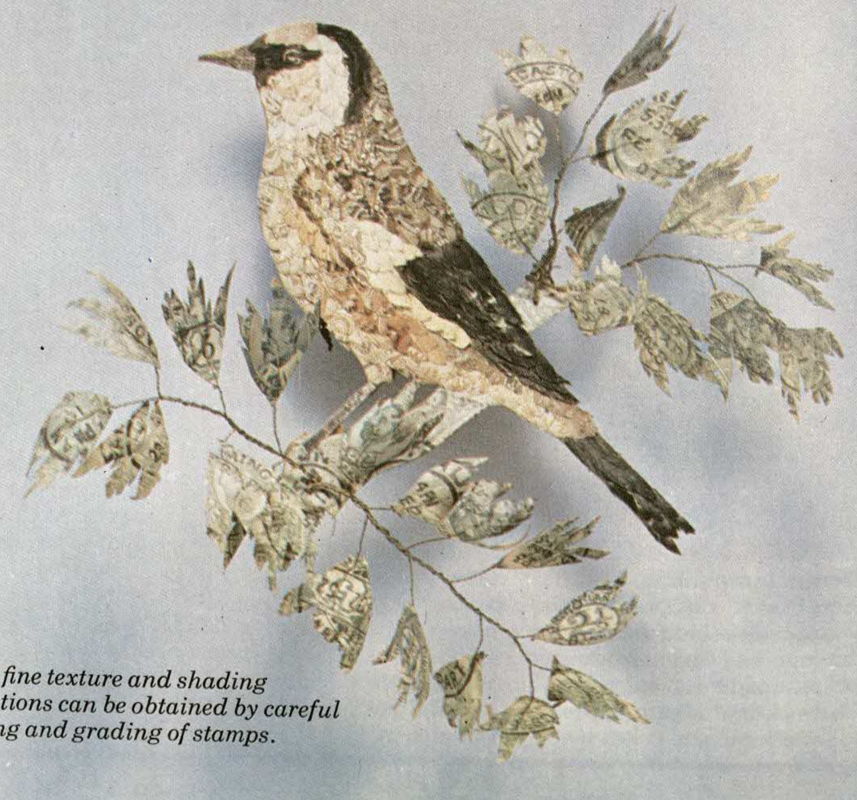
Another advantage of using stamps to make pictures is that their colours are fast and will not fade. Something of lasting beauty can be created from today's commonplace ephemera.

Touches of water-colour are useful for brightening up parts of a picture: used sparingly, water-colour can be an effective addition to a stamp picture.

Making a stamp mosaic

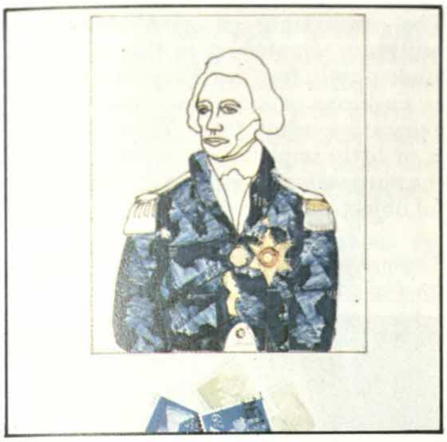
It is essential that you know exactly the position of the stamps and the kind of composition you want before you start pasting down the stamps, since it will be very difficult to change their position once they are stuck to the background. In order to avoid any mistakes, make an accurate master drawing of the picture you intend to make on a piece of tracing paper.

Do not make your first picture too large if you are using very small pieces of cut stamps: one about 10cm (4″) square is a good size with which to



Very fine texture and shading variations can be obtained by careful cutting and grading of stamps.

Melvin Grey


Steve Bicknell

Half-finished portrait using new stamps.

begin. However, if you are using stamps full-size to make a pattern similar to that in the large picture below, they look more effective when covering a large area.

Cut the stamps to show that they are stamps and not simply pieces of coloured paper: there is no point in trying to disguise the raw material of the picture.

☐ Make a master drawing of the picture as already described. It must include every essential detail, including the position of the frame if you wish to have one around the picture. It should look like a cartoon for a stained glass window, with the whole picture composed of different sections, each clearly marked off from the others and each intended to be filled with stamps of a different colour or two shades of the same colour. The uncompleted part of the Lord Nelson portrait shown illustrates this.

☐ Transfer the drawing, using carbon paper, on to the background of the mosaic. Make notes on the tracing paper about the colours you want to use for each section.

☐ To cut out the pieces of the mosaic, start with the biggest block of colour and check that you have enough stamps of that colour to fill it. Small details, such as buttons, can be superimposed on the main block of colour afterwards. Lay the master drawing on top of a stamp of the right colour.

☐ Trace the outline you wish to cut through the tracing paper on to the stamp, using a hard pencil.

☐ Remove the tracing paper from the stamp—the traced line should show on the stamp. Emphasize this line by going over it with a fine black pen.

☐ Cut round the line on the stamp, lay the cut piece face down on a waste pad of paper and apply thinned glue as already described. Pick it up with the tweezers and position it. Rub your finger over it to make sure it sticks to the background.

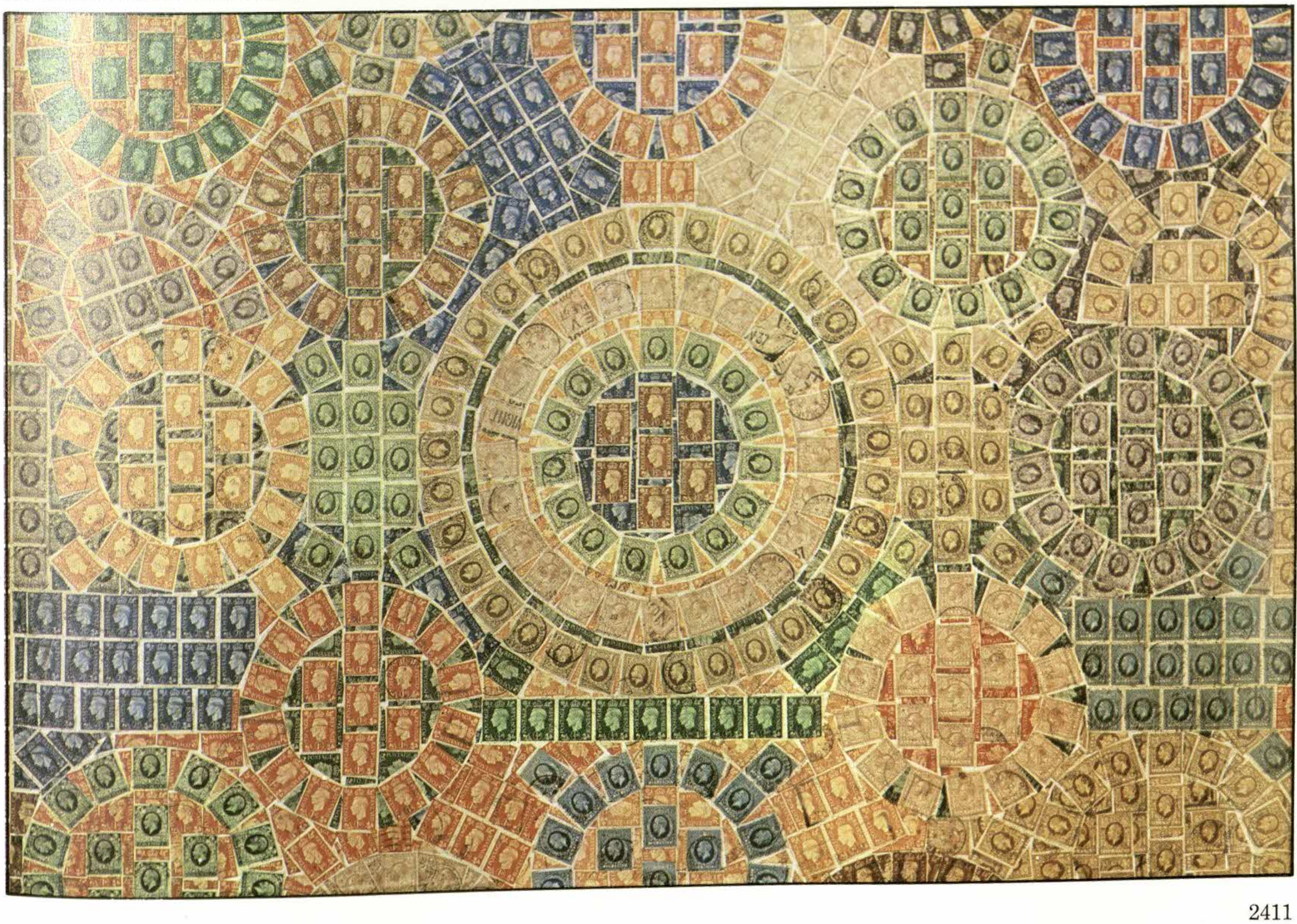
Steve Bicknell

Tiny stamp strips used to make flowers.

☐ Repeat the process with all the stamps, filling in one section of colour at a time, from the largest to the smallest sections, and leaving small details until the last.

☐ Put in any necessary lines or tiny details with water-colour.

A very fine mosaic picture, made from old stamps.

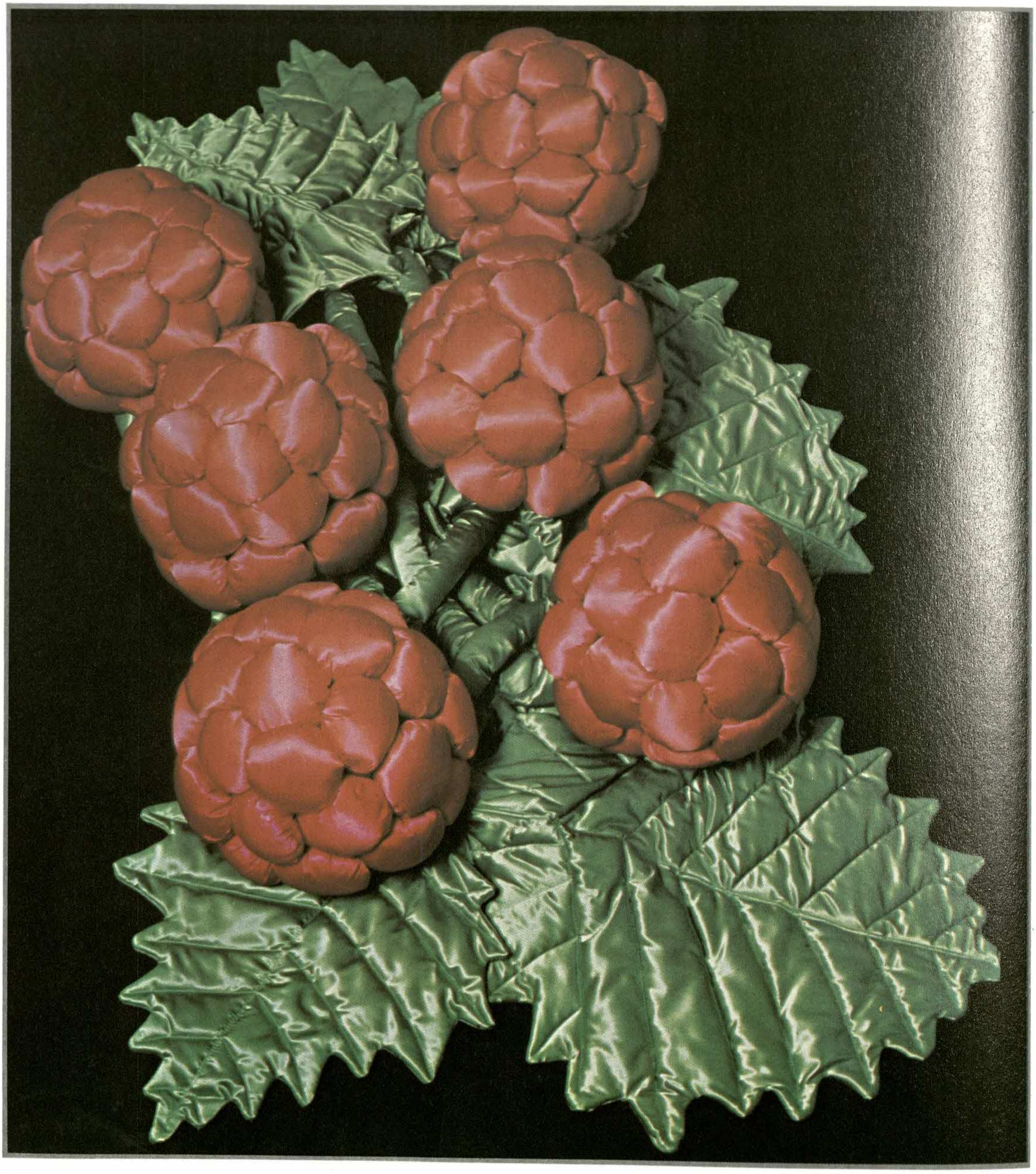

Paul Kemp

Giant-sized vegetables

Cloth — soft sculpture 3

The attraction of giant-sized soft sculpture vegetables is that they are made purely for fun. They can be used as cushions or simply as unusual and decorative adult toys. Their function is of little importance, however—it is the purposeless luxury of these delightful objects that makes them appealing.

These enormous raspberries, designed by Felicity Youett, make perfect gifts.



Peter Mackertich

Soft sculpture has both a tactile and a visual appeal. Fabric should therefore be chosen carefully for texture and colour. The raspberries and greenery illustrated here are made from satin. Soft and silky to the touch, shiny and bright to the eye, they look lush and fresh—almost good enough to eat.

Use real fruit and vegetables for inspiration to create new designs and build up a collection of these amusing objects. Following the general principles described here, make gigantic pea pods to use as cushions or bright orange carrots and colourful fruit as entertaining decorations.

Raspberry and greenery

The raspberries and stems are made by stuffing fabric shapes with kapok, while the leaves and calyxes are made by filling fabric cases with wadding. The shapes are determined by the patterns of the outer fabric cases, and accurate cutting and seaming are thus essential.

Patterns are given for one giant-sized raspberry, about 56cm (22″) in diameter. The patterns can, however, be adapted to any size.

Make paper patterns for the raspberry base, calyx and leaf by enlarging fig.1 (see Design know-how chapter 4, page 112). Seam allowances of 6mm (¼″) are included throughout.

You will need:

Pencil.

Plate about 21.5cm (8½″) in diameter (optional).

3.7m (4yd) of 90cm (36″) wide red satin for the raspberry.

1kg-1.35kg (2lb-3lb) kapok for the raspberry.

53cm x 106cm (21″x 42″) green satin for the calyx.

53cm x 106cm (21″x 42″) synthetic wadding for the calyx.

76cm x 152cm (30″x 60″) green satin for the leaf.

76cm x 152cm (30″x 60″) synthetic wadding for the leaf.

21.5cm x 30cm (8½″x 12″) green satin for the stem.

57gm-85gm (2oz-3oz) kapok for the stem.

Matching thread.

The raspberry

☐ Cut out six shapes for the raspberry base (see fig.1a) from red satin.

☐ Also cut 30 to 35 pieces of red satin 23cm (9″) square to make the individual facets, hereafter termed 'berries'.

☐ To make a berry, draw a circle about 21.5cm (8½″) in diameter centrally on one of the 23cm (9″) squares. If you do not feel confident enough to draw this freehand, a quick and accurate method is to use a plate about 21.5cm (8½″) in diameter. This measurement need not be absolutely exact, as long as the circle lies within the sides of the square, but it should be maintained consistently on all the squares.

☐ Using a double thread, work small running stitches along this pencil line all round the circle, leaving long loose threads on the right side of the fabric.

☐ Take a handful of kapok and squash it in the palm of your hand to form a compressed ball of 7.5cm-10cm (3″-4″) in diameter.

☐ Place the ball of kapok in the centre of the satin square and gather up the threads tightly.

☐ Make sure that the ball is well filled. Push in more kapok if necessary.

☐ Wrap the loose threads round the neck of the ball several times so that the ball is tightly shut and finish off with a few back stitches to secure the threads (fig.2).

☐ Make up 30 to 35 balls in the same way.

☐ To make the raspberry base, place one of the six base sections on top of another, right sides facing. Stitch along one long curved edge to join into a pair and open out.

☐ Repeat with the other four pieces to make a total of three pairs.

☐ Place one pair over another, right sides facing, and stitch along one long curved edge to join the two pairs together and open out.

☐ Join each long curved edge of the third pair to one of the other two pairs in the same way.

☐ Turn the completed base piece right side out.

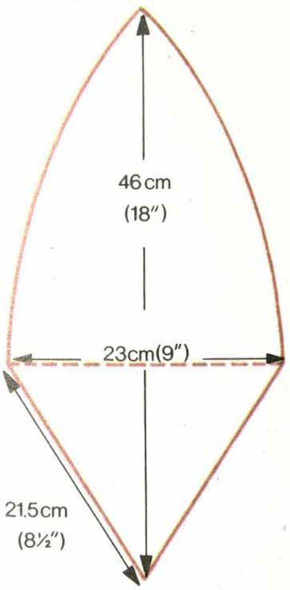
☐ To assemble the raspberry, the berries must be attached to the base. To attach the first berry to the base, make a small hole where the six seams meet in the centre of the base section.

☐ Poke the raw edges of a berry through the hole to the wrong side of the base.

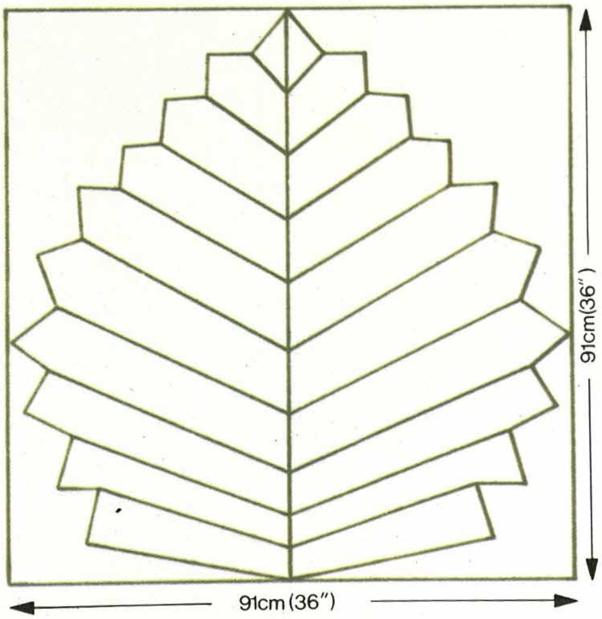
☐ On the wrong side of the base, open out the raw edges of the berry and sew them down with firm stitches to hold in place. It does not matter if these stitches are visible on the right side of the work, since they will be hidden by berries.

☐ Take three or four berries and position them round the central berry so that they are all close to each other. Judge where the centre of each berry will lie on the base section, and cut a small hole for each one where relevant. (The holes will also be hidden by berries.)

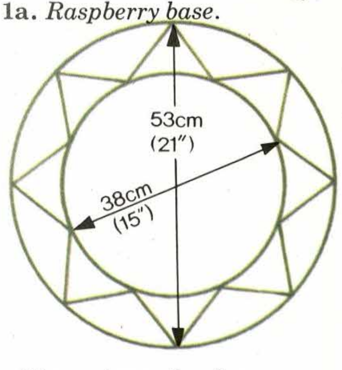
☐ Push the raw edges of each berry through a hole and stitch in place on the wrong side.



1a. *Raspberry base.*



1c. *Dimensions of pattern for leaf.*



1b. *Dimensions of calyx.*

2. *A completed berry.*

Coral Mula

Peter Mackertich

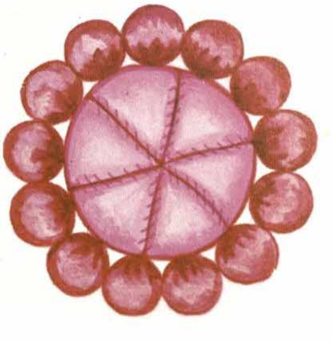
Huge pea pods, mushrooms and carrots, designed by Felicity Youett.

☐ Continue attaching berries to the base, working in ever increasing circles. The final ring of berries is placed at the widest part of the base.

Note: the total number of berries required for each raspberry can vary from 30 to 35, depending on the quantity of filling in each individual berry and the worker's own method of fitting them together.

☐ When all the berries have been sewn on, stuff the base with kapok.

☐ Fold in the six pointed sections so that they meet in the middle, and, turning in the seam allowances as you work, oversew the six edges together to close the raspberry. This side of the raspberry base should form a flat circle (fig.3).



3. *Flat underside of raspberry base.*

Coral Mula

The calyx

The finished calyx is about 51.5cm ($20\frac{1}{2}''$) in diameter.

☐ Cut out two star-shaped calyx pieces from green satin (see fig.1b).

☐ Cut out two more star shapes from synthetic wadding.

☐ Place the two satin stars, right sides facing, on top of the two thicknesses of wadding.

☐ Tack and stitch through all the layers, all round the edge.

☐ Trim away the wadding close to the stitching line.

☐ In the top thickness of satin only, cut two slits, about 7.5cm (3″) long, to form a cross in the centre of the star shape.

☐ Turn the piece right side out through these slits.

☐ Place the flat side of the raspberry centrally on the slit side of the calyx to hide the cuts. Catch stitch the raspberry firmly to the calyx.

The leaf

The finished leaf is approximately 90cm ($35\frac{1}{2}''$) long.

☐ Cut out two leaf shapes from green satin (see fig.1c).

☐ Cut out two more leaf shapes from synthetic wadding.

☐ Place two satin leaf shapes, right sides facing, on top of the two layers of wadding.

☐ Tack and stitch through all the layers round the edge, leaving an opening to turn through.

☐ Turn the leaf right side out.

☐ Turn in the raw edges of the opening and slip-stitch together.

☐ Work a straight machine stitch along the vein lines, as indicated on the pattern.

The stem

☐ Take the strip of green satin, 21.5cm ($8\frac{1}{2}''$) by 30cm (12″) and fold it in half lengthwise with right sides facing.

☐ Stitch along the long edge and one short end to form a tube.

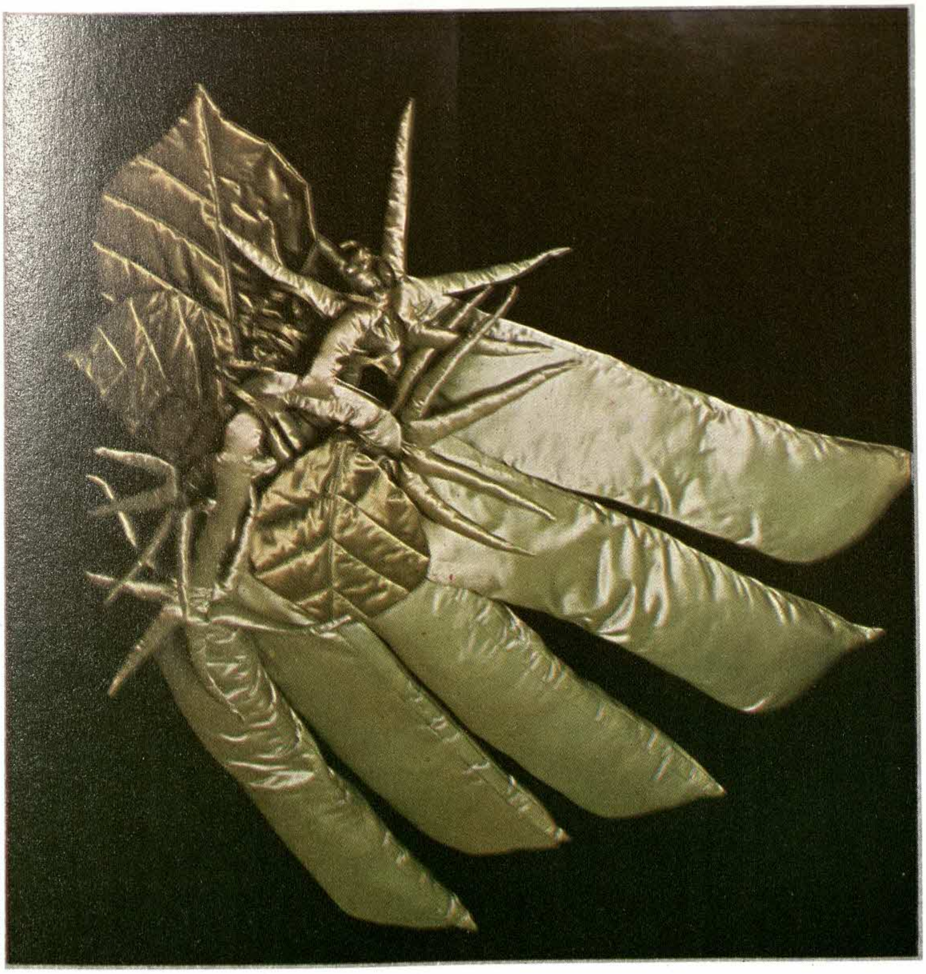
☐ Turn the tube right side out and stuff firmly with kapok.

☐ To join the stem to the raspberry, place the open end of the stem at right angles to the calyx. Turning in the raw edges of the stem as you work, slip-stitch them firmly and neatly to the calyx.

☐ Sew the leaf firmly to the stem where desired.

Paf International

Above: make a collection of colourful fruit by stuffing fabric cases with kapok, and adding stalks and quilted leaves for finishing touches. Combine brightly coloured plain and patterned fabrics for an original and vivid effect. Try making patchwork fruit, or adding flat cut-out shapes for leaves.

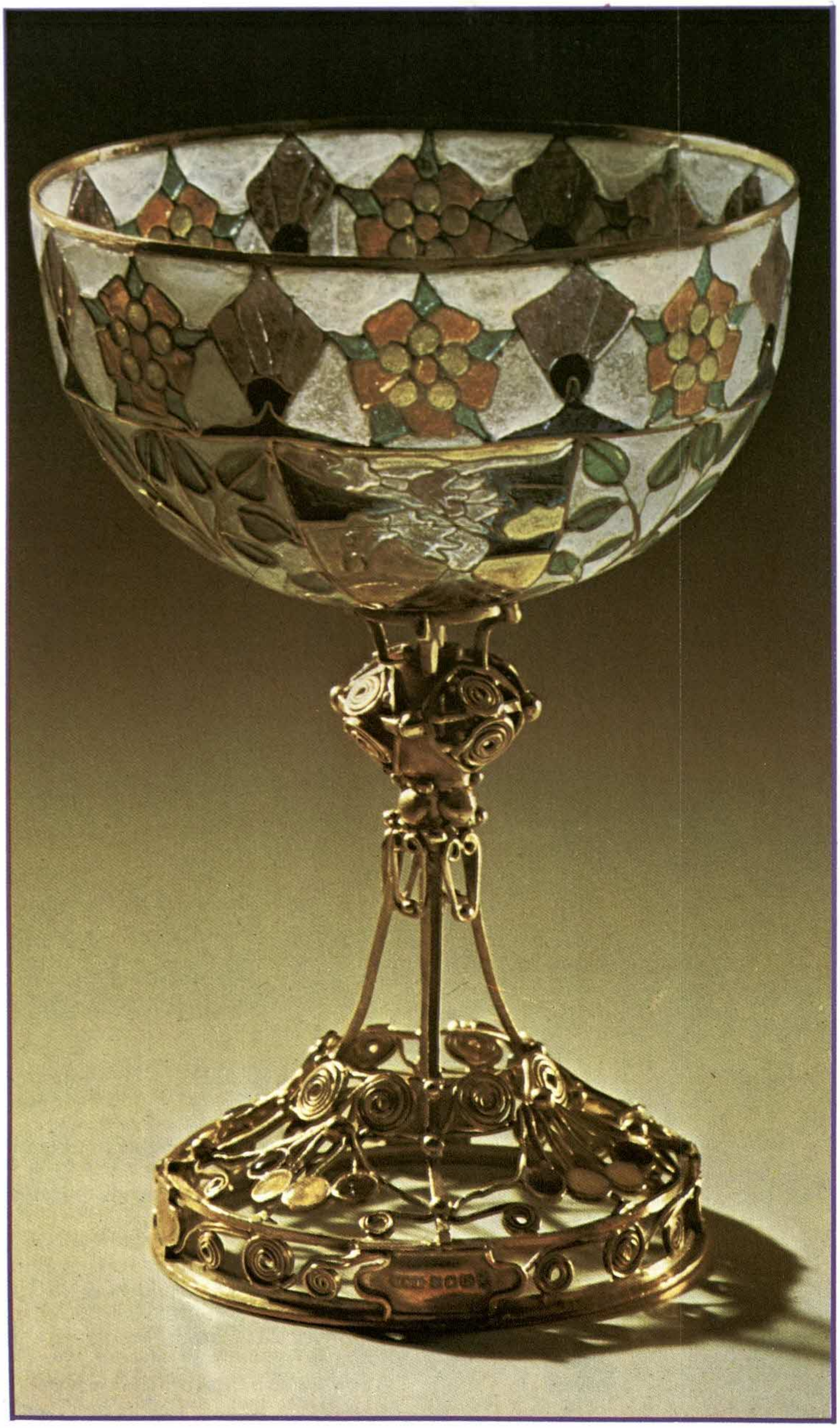


Peter Mackertich

Below: life-like soft sculpture peas.

'Plique-à-jour' jewelry

Enamel 14



The Worshipful Company of Goldsmiths

Plique-à-jour is a technique by which extremely delicate and fragile-looking pieces of jewelry can be made. It was more frequently used in the 1900s than it is today and the art nouveau jewelry made at that time by artists such as René Lalique includes some fine examples.

Transparent enamels are used in a metal framework composed of small cells which have no backing. The colours take on an extra brilliance and clarity as light passes through them, giving a gem-like quality to the piece.

There are two ways of making the metal framework. One of these is to make it from fine (pure) silver rectangular wires, in a similar way to *cloisonné* (without the metal backing). The alternative is to cut shapes from a sheet of metal with a jeweller's piercing saw. The first method makes the more economical use of the metal, as none is wasted, but the second is probably the easier method for the beginner.

The framework is laid on a sheet of mica—a naturally occurring mineral which is sold in transparent, yellowish thin sheets, by enamelling suppliers, electrical shops and some hardware shops. The cells of the framework are filled with a 'wet pack' of enamel as described for *cloisonné* (Enamel chapter 11, page 2174).

The piece, still on the mica, is then placed on the wire mesh stand and fired. This process is repeated until the cells are full. Alternatively, some craftsmen prefer to fill the cells with many very thin layers of enamel as described for working on silver in Enamel chapter 13, page 2298.

When the cells are full, the mica is removed and the back of the work is stoned with a carborundum stick under running water. The piece is then balanced on a stilt, with the back uppermost, and then re-fired to reglaze the enamel.

Suitable items. To make the most of *plique-à-jour*, light must be able to pass through the enamel so it is generally better to make ear-rings and pendants rather than brooches.

The design. The *cloisons* should be kept quite small, not larger than 6mm ($\frac{1}{4}$") across, or the enamel will tend to drop out during firing. In addition, the cells should be fairly regular in size because cells of very irregular sizes may cause the piece to distort in the kiln. These two facts will, obviously, affect the choice of design.

If your design demands larger areas of a colour than one cell the area must be made up of several cells. (If only one colour is used in a piece the delicate filigree work will be emphasized.)

Unusual gold and plique-à-jour enamel cup made in 1927 by Helen Ibbotson.

A number of small pieces can be made up and joined together with jump rings in a variety of different ways to form a drop ear-ring, a necklace or a bracelet (fig.1). When using this method, remember to include in the design little rings, through which the linking jump rings will be carried, as these cannot be soldered on after the piece has been enamelled. If you are using a silver wire framework these rings can be jump rings soldered in place before enamelling (Enamel chapter 13). If you are cutting out your design with a piercing saw, the shape can include the small rings. This avoids soldering.

Making a metal frame

The framework for *plique-a-jour* can be made from fine (pure) silver rectangular wire or it can be cut from a sheet of copper or fine silver.

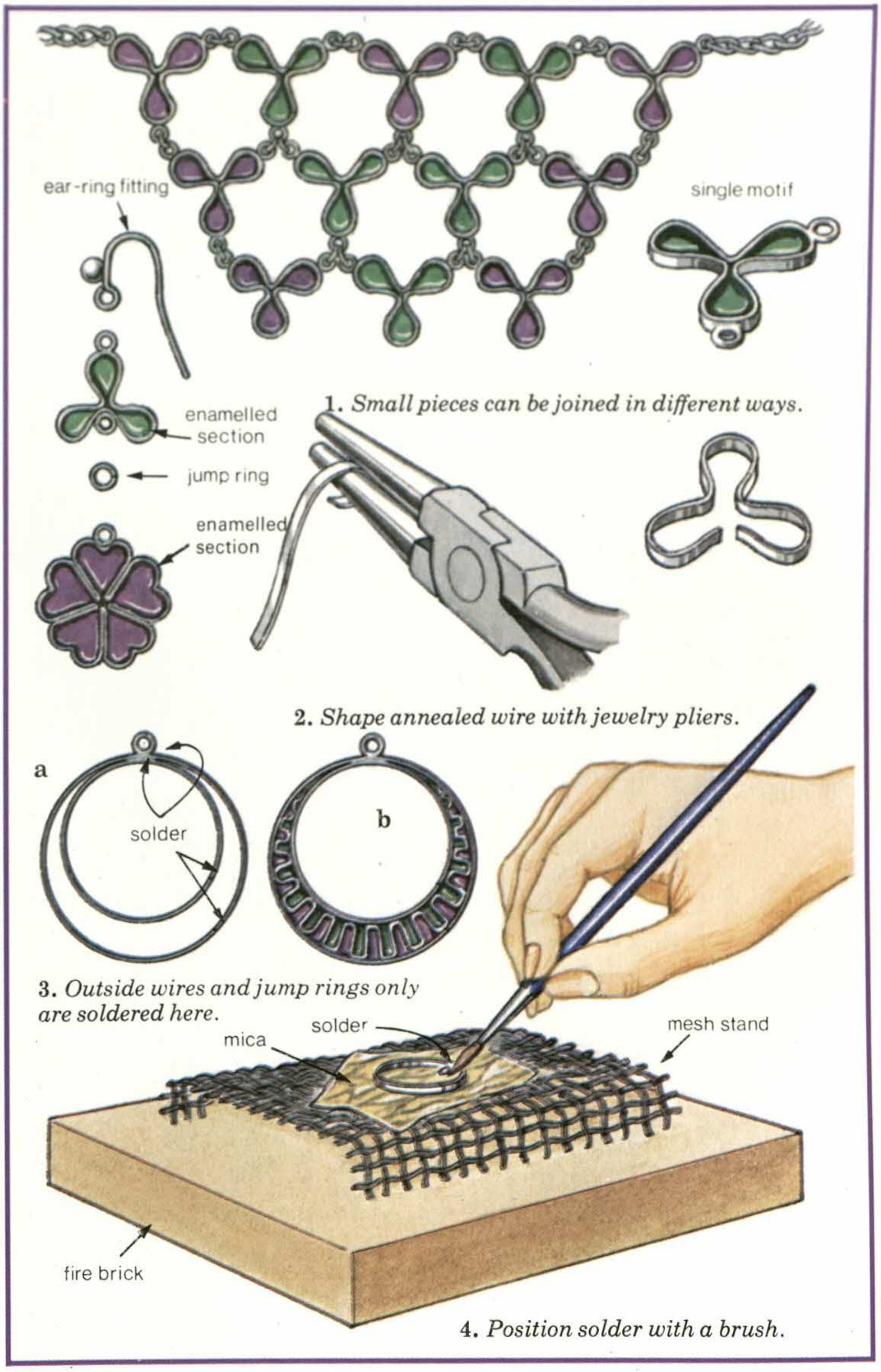
Silver wire. A framework of 1.5mm x 0.31mm (.06"x.012") fine silver wire is made up in a similar way to that used for *cloisonné* (Enamel chapter 11), ie the wire is annealed and then shaped using fine jewelry pliers or tweezers (fig.2).

For a simple shape, like the trefoil used for the silver bracelet in the photograph overleaf, you will not need a preliminary drawing. For more complicated designs, however, make a drawing first and then, as you shape the wires, lay the work on the drawing to check that it is the same.

It is necessary to solder the work at strategic places, using hallmarking quality enamelling or hard silver solder. Silver enamelling solder has a high melting point and should not run when the enamel is fired. It is a good idea, however, to cover any solder which is to be exposed to the direct heat of the kiln with a paste of powdered rouge (or the whiting sold by hardware shops) mixed with water, before placing the work in the kiln. This will make sure that no solder runs.

Try to plan the design so that there will be as few solder joins as possible. Each trefoil of the bracelet has just one solder join in the centre and the jump rings soldered in place.

With a more intricate design more joins are necessary—use one continuous wire wherever practicable, otherwise as few wires as possible. Solder outside wires together, and if necessary, solder the main *cloisons* together to make the work stronger and ensure that they will not be moved accidentally when being filled with enamel. With a design like the crescent-shaped ear-ring (figs.3a and b) it is necessary to solder only the outside wires and the jump ring in position.



1. *Small pieces can be joined in different ways.*

2. *Shape annealed wire with jewelry pliers.*

3. *Outside wires and jump rings only are soldered here.*

4. *Position solder with a brush.*

Paul Williams

Place the silver wire design on a piece of mica, place mica on a mesh stand and place the stand on a fire brick.

Paint flux on the joins just where the solder is to run, eg where two ends of wire are to be joined paint flux on each end. With the brush still moist with flux, pick up tiny snippets of solder and place them on the joins (fig.4).

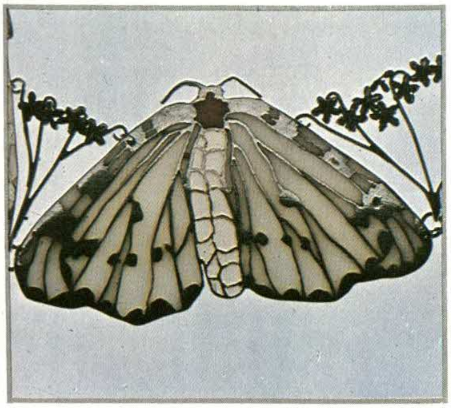
Solder joins by playing blowtorch flame down on to them. Pickle to remove all remaining traces of flux as described in Enamel chapter 13.

Do *not* give the piece a 'dry run' firing in the kiln as this might melt the delicate silver wires.

Sheet metal. The design can be cut from either 1.25mm (16-18 gauge) copper or fine silver of the same thickness. The design is then drawn out, stuck on to the metal and then cut out with a piercing saw (Enamel chapter 10, page 2148). If the divisions between the cells are not delicate enough they can be filed out to any degree of fineness required. In any event the inside of the cells must be scraped with a needle file until the metal is clean and bright so that the enamel will adhere well.

Once cleaned do not touch the metal with your fingers or you will make it greasy. It is a good idea to leave the cleaned metal in a dish of fresh water until it is needed.

Michael Sharman



Steve Bicknell

This delicate butterfly necklace was cut from fine silver with a piercing saw. Designer: Annette Martin.

Applying and firing enamel

If you are grinding your own enamels, grind until the powder is no coarser than silver sand. Although it is said that the coarser the enamel the more brilliant it will become when fired, especially the transparent enamels used in *plique-à-jour*, if the enamel is too coarse the narrow spaces will not be filled properly and the enamel may have air bubbles in it when fired.

Whether you grind your own enamels or whether you use ready-ground jewelry enamels, make sure you wash the powder thoroughly.

Take your cleaned metal shape and lay it on a sheet of mica on the mesh stand, using tweezers to avoid handling. Fill the cells with wet enamel powder in the same way as described for *cloisonné* (Enamel chapter 11) and then draw off any excess water with absorbent kitchen paper. (The enamels should now have a sugary appearance.)

Dry out the enamels by placing the piece, on the mica and the stand, on top of the hot kiln. To test if the powder is dry, open the kiln door and if no steam rises from the enamels they are dry enough to fire. (If the enamels are wet when fired they will fly off in the kiln and the cells will have to be refilled and re-fired.)

When the powder is completely dry, place the piece, on the mica and wire mesh stand, in the kiln. Do not leave the kiln or put down the tongs as the enamel will take only a few seconds to fuse. Watch the work carefully. Once the enamel begins to melt, you may remove the piece for a second or two to see how it is but you must return it to the kiln immediately. When the surface is melted and shiny, remove the piece from the kiln and put it in a warm place (close to the kiln is a good position) to cool slowly. It is important that the piece does not cool too quickly. The level of the enamel will sink during firing and must be topped up, dried out and re-fired. If the enamel has drawn away from the sides of the cells scrape them clean and refill.

Repeat the topping up process until the cells are full. (If the colour is deep enough after one application of enamel, use a silver grade transparent flux enamel for topping up.

Remove the mica, which should break away quite easily, and smooth the enamelled surfaces under running water with a carborundum stick until the surface is smooth and matt.

Make sure all traces of carborundum have been washed away, then turn the piece so that the back is uppermost and balance it on the stilt so that the enamel does not touch the stilt. Re-fire very carefully and take out the piece as soon as the enamel glazes.

Great care must be taken with this final firing—the kiln should be just hot enough to re-glaze the enamel.

Note: sheet metal *plique-a-jour* work is fired with the kiln heated to the usual firing temperature, ie the firing chamber should be bright orange. If using silver wire the kiln should be a little cooler, ie dull red glow in firing chamber. When using silver wires remember always to cover any exposed solder with rouge.

Polishing and finishing

By now the metal will be a dull grey, whether it is copper or silver. If there are any bits of enamel on the edges, stone them off carefully under running water with a carborundum stick.

Clean and polish the edges and the top of the wires using a wet, water of Ayr stick, filed to a point, taking care not to scratch the enamel. This will leave the metal a dull copper or silver colour.

Rinse off all traces of water of Ayr stick, using a soft silver cleaning brush or soft nail-brush, and polish with successively fine polishing grades of emery paper.

Then polish with tripoli and finally with rouge, using an electric jewelry polishing machine or rubbing them on with a cloth or a piece of chamois. Wash well with washing-up liquid and soft silver cleaning brush after each polish.

Alternatively, polish with non-abrasive metal polish.

Finally attach any fitting such as ear-ring wires or join up for a bracelet or necklace and attach a clasp.

Ear-rings

The ear-rings in the photograph are made from copper but they could be cut from a sheet of fine silver.

You will need:

Equipment as for cutting copper with a piercing saw (Enamel chapter 10).

Enamelling equipment as described in Enamel chapter 1, page 106, plus a stilt.

Materials. Piece of 1.25mm (16-18 gauge) copper, approximately 7.5cm x 5cm (3″x 2″).

Transparent enamel powders.

Silver grade transparent flux enamel powder (optional).

2 pieces of mica about 5cm x 4cm (2″x 1½″).

Ear-ring fitting.

Polishing grade emery paper, grades 2/0, 3/0 and 4/0.

Small spatula.

Paintbrush.

Electric jewelry polishing machine (optional).

Two pieces of chamois (optional).

Soft silver cleaning brush or nailbrush.

Soft cloths.

Tripoli and rouge (optional).

Non-abrasive metal polish (optional).

☐ Trace off the ear-ring design, from the photograph, twice, and glue tracings to the copper.

☐ Cut out the shapes with the piercing saw and then wash off the paper pattern.

☐ If the divisions between the cells are not fine enough, file them out with a needle file. In any case, scrape the insides of the cells with a needle file to ensure that they are clean and bright.

☐ Place the ear-rings in a saucer of clean water until required.

☐ Remove ear-rings from the water, dry and, using tweezers, place them on the mica.

☐ Place mica on the mesh stand.

☐ Wash the enamels and fill the cells using a paintbrush. Or, use a small spatula and the end of a paintbrush to fill the cells.

☐ Switch on the kiln so that it will be hot enough, ie bright orange by the time you are ready to enamel.

☐ Place the mesh stand, with mica and ear-rings on it, on top of the kiln to dry the enamel powder.

☐ When enamel is dry fire the work.

☐ Let the work cool slowly and clean sides of cells if necessary. Then, if the colours are deep enough, top up the enamel in the cells with the transparent, washed flux enamel. If you want deeper colours re-fill cells with the same colours as before. Fire.

Continue in this way until cells are full.

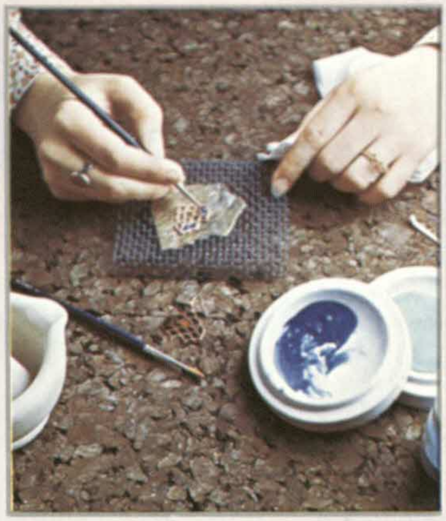
☐ Remove mica and smooth the enamelled surfaces under running water with a carborundum stick, until the surface is smooth and matt and the copper lines are clearly visible.

☐ Wash the ear-rings well under running water with a soft silver cleaning brush or soft nail-brush, making sure all traces of carborundum have been removed.

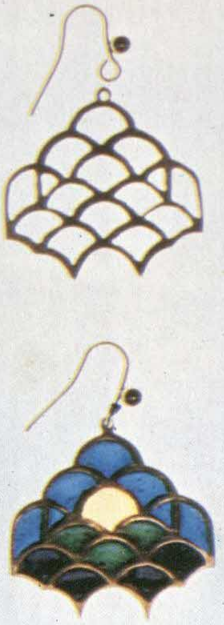
☐ Turn the ear-rings over and place one of them on the stilt so that the back is uppermost. Be sure the enamel does not touch the stilt. Cool the kiln a little and re-fire very carefully, taking out the piece as soon as the enamel glazes.

Repeat with the other ear-ring.

☐ Clean and polish the work as previously described, then join the ear-rings to the fittings by the rings at the top.



Place the cut out shape on mica and, using a paintbrush as shown, carefully fill the cells.



Copper ear-rings cut from sheet metal—one enamelled and one unfilled—and a bracelet of trefoils shaped from fine rectangular silver wire.

Steve Bicknell

Grinding enamels

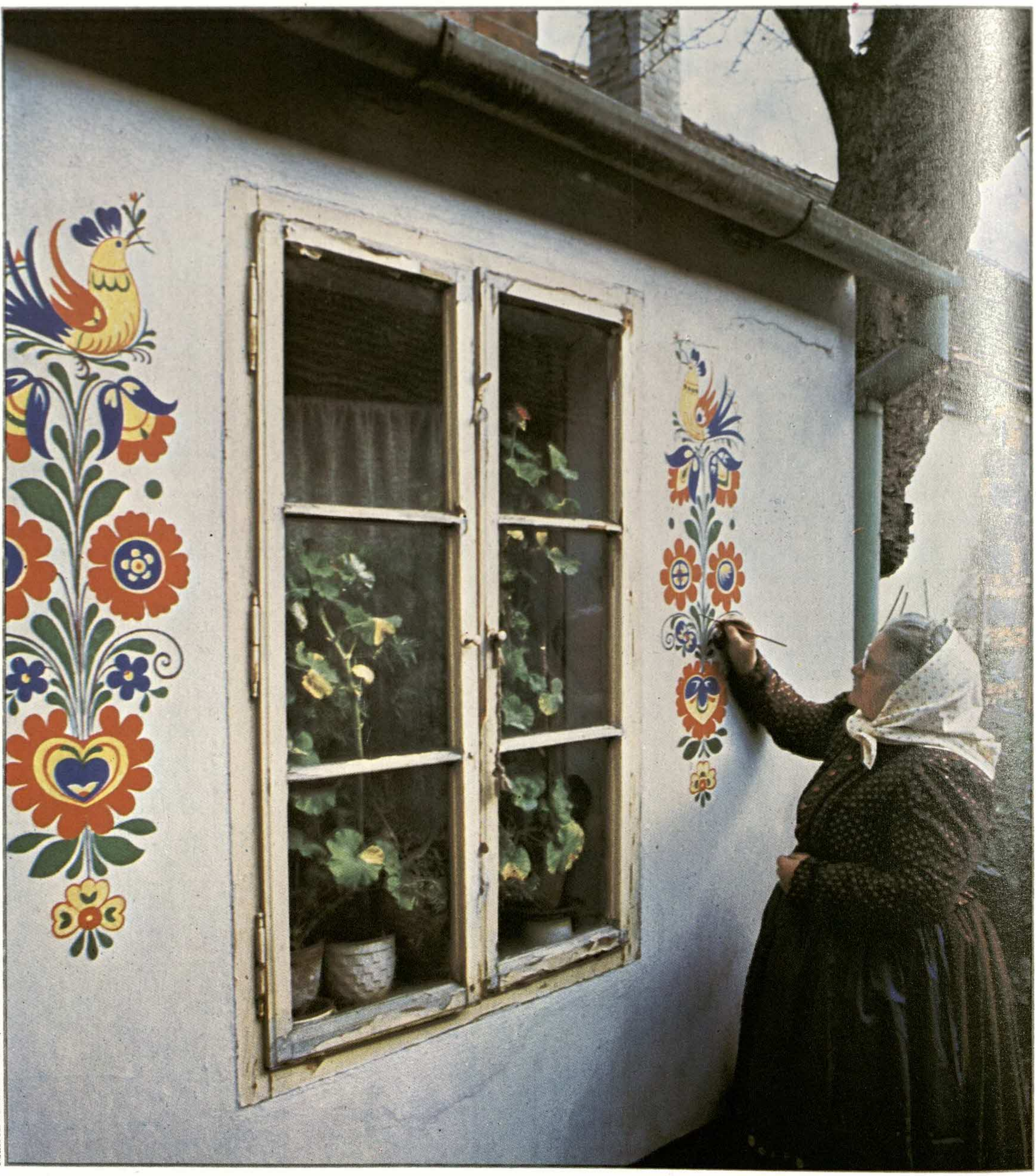
Some enamellers prefer to grind their own enamel powder before tackling a particular piece of work. The lump enamel which is used for this purpose has a longer shelf life than ground powders. In addition it can be ground to the exact fineness you require.

Lump enamel is placed in a mortar, covered with clean water and ground with a pestle. The powder is then thoroughly washed.

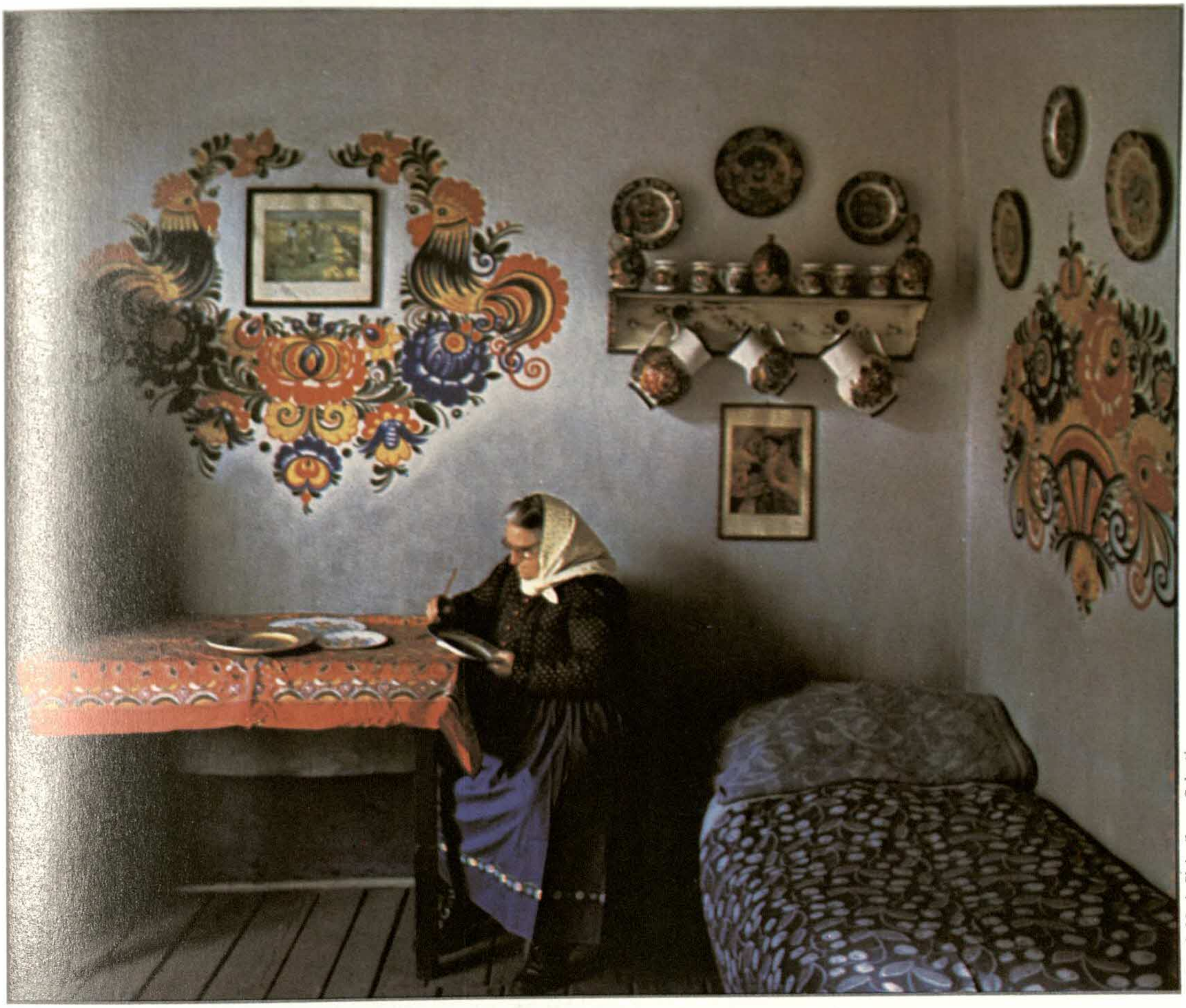
European folk decoration

Colour — Folk art 2

Peasants throughout Europe have been decorating their houses, clothes and accessories since time immemorial. Mid-European countries such as Yugoslavia, Romania, Czechoslovakia and Poland have a rich, colourful heritage of folk art which can still be seen today; so too do Germany, France, Switzerland and the Scandinavian countries. Most European folk decoration was executed by untrained hands in self-



Maison de Marie Claire/Laura Salvati



Simple, sparsely furnished homes were enriched with strident coloured mural decorations and painted crockery.

Maison de Marie Claire/Laura Salvati

sufficient homes. Sheep were bred for wool and cloth was woven and embroidered literally all under the same roof. Each family had its own decorative traditions and, as the families grew, the traditions spread.

The two main qualities of this art, the gay and striking use of colour and the extremely delicate work, are common to folk art throughout Europe—so too is much of the symbolism. For example, a heart in various forms, symbol of love and fertility, can be seen in the north of Scandinavia decorating chairs and as far south as Yugoslavia on the peasants' costumes.

Various motifs and symbols from prehistoric times and from many ancient civilizations have been interwoven into what we see today but, in most cases, the real implications of the symbolism have been lost. What remains is largely due not to significance but to the appeal of the forms themselves which have been repeated by successive generations.

Left: often houses were painted with colourful designs to try and brighten up an otherwise cheerless landscape.

Folk motifs can be used in much the same way today. Their simple shapes do not require professional expertise and can be applied by amateurs to all sorts of materials.

Libraries contain books which illustrate the folk art of many European nations. Postcards from these countries are another source of visual material which can be copied and transferred or used as the basis for a design of your own making. It is, after all, from old designs that all new ones are created.

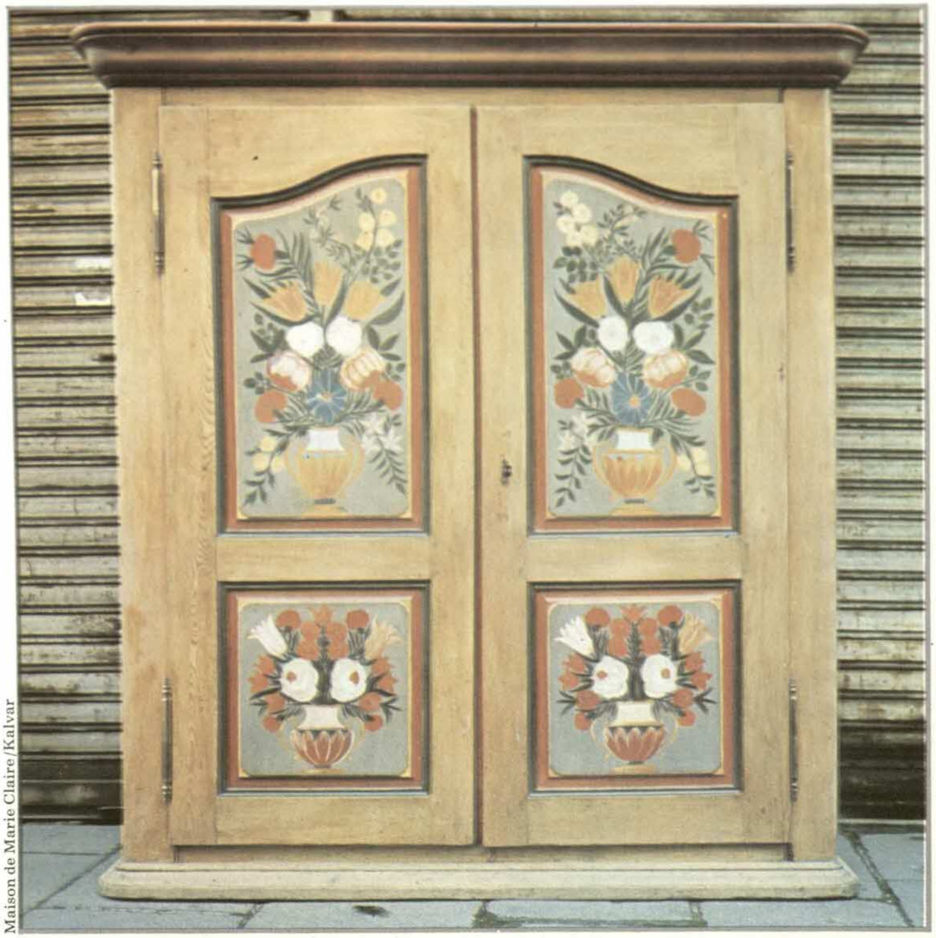
Motifs

Inspiration can be derived from folk motifs for almost any form of decoration.

Geometric designs are one of the oldest known folk decoration styles. For the amateur decorator geometric designs make a good starting point whether it be for carving, embroidery or painting.

Geometric designs were embroidered on to folk costumes as a border or along the seams. Often the embroidery on the costume or household linen would take years to complete. In Romania young girls would start embroidering for their bottom drawer at a very early age so that everything, including embroidered night-shirts for their prospective husbands, would be completed in time. Embroidery was an integral part of the peasant's life.

A useful adaptation of embroidered borders is to give new life to old shirts with frayed cuffs. Embroider a simple geometric border, attach it to the cuffs and the shirt is transformed. A tablecloth, like the one illustrated overleaf can be made from squares embroidered



Maison de Marie Claire/Kalvar

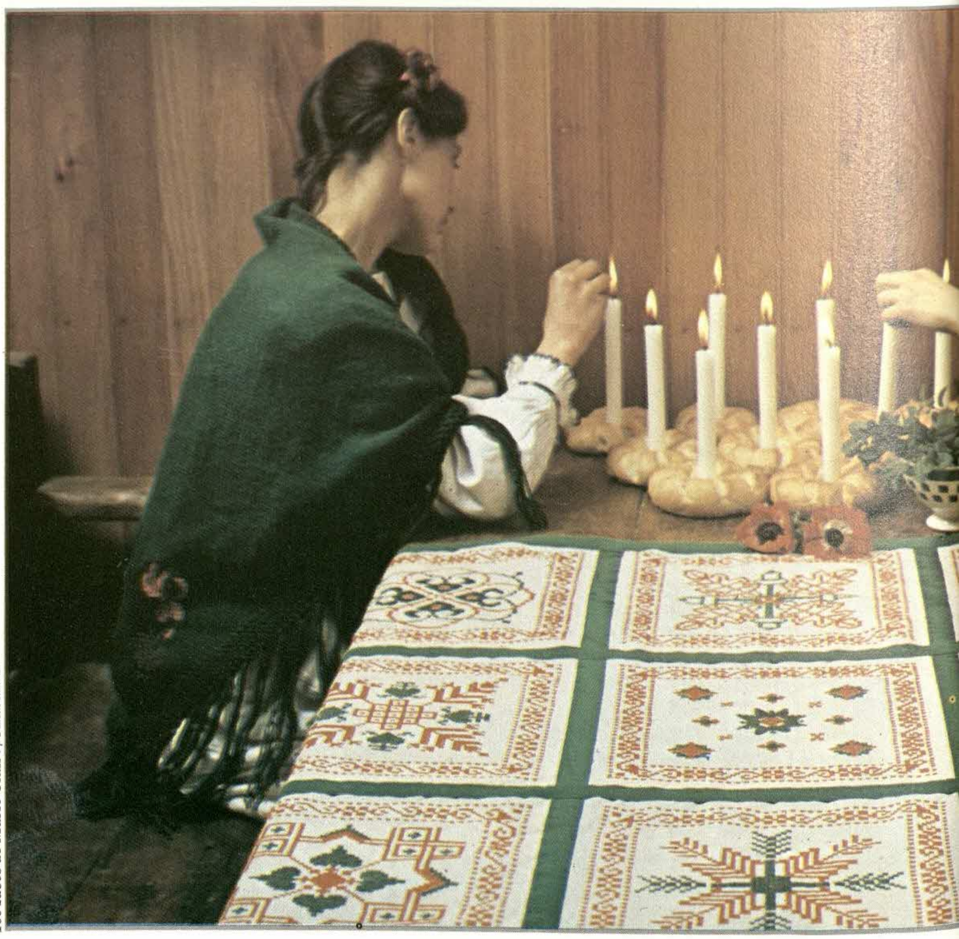
Utilitarian furniture is lavishly decorated with floral designs.

with cross stitch, attached to a brightly coloured cloth. The designs could be used equally well on a blouse or translated to printed designs for wooden boxes or old chests.

Mid-European wooden houses often had decorative, geometric pattern borders around the doors and windows, either painted or carved. These provide a good source of decorative design both for painting wooden furniture and reproducing into needlework. Furniture is decorated in much the same fashion.

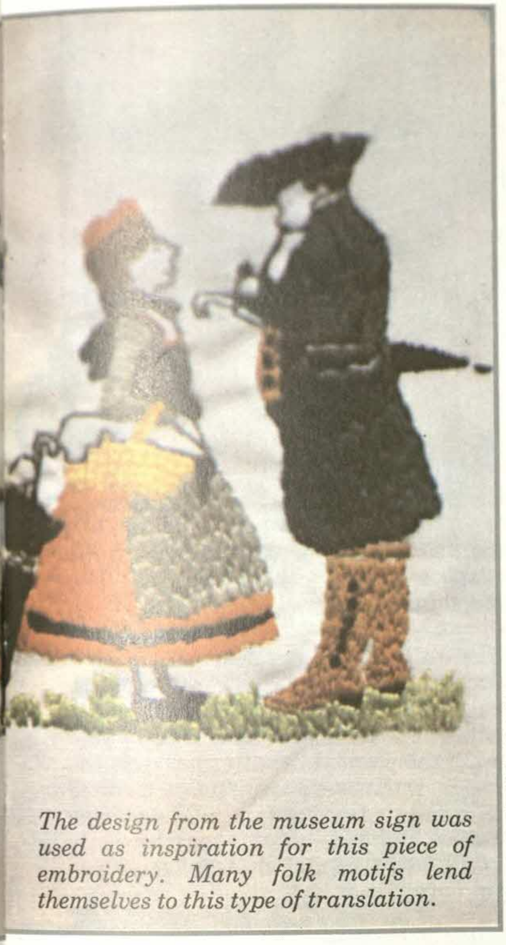
Flowers, fruit and other fertility and life symbols such as the sun, hearts and stars followed geometric designs in the time scale.

In the early days colours were created using natural dyes and pigments. Red from wild crab-apple leaves, yellow from the osier, black from the alder or birch and fawn from the walnut. Salt was used as a mordant for dyes. Chemical dyes and synthetic paints began to be used in the 19th century; from then on the colours became more strident than those produced by the natural dyes.



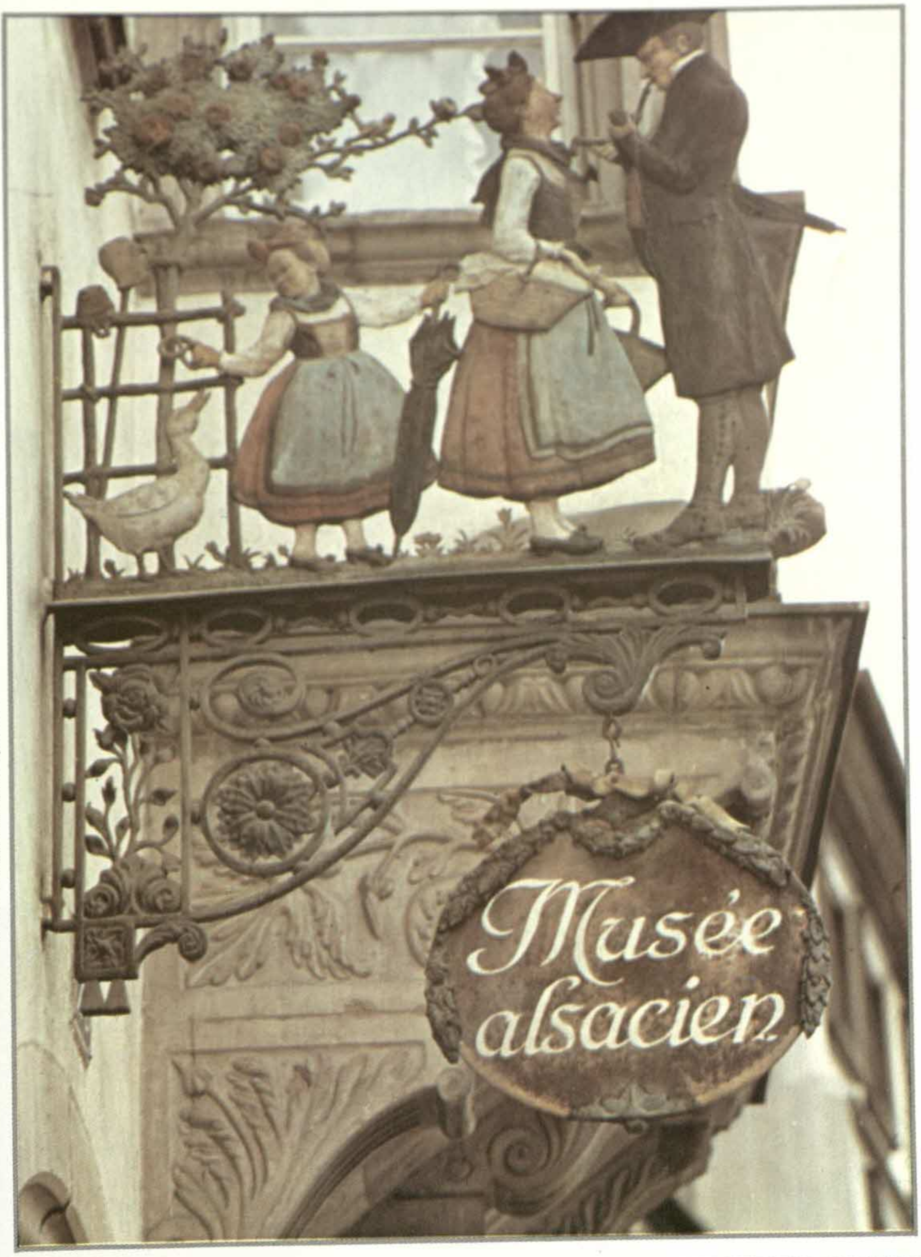
100 Idées de Marie Claire/Chabaneix

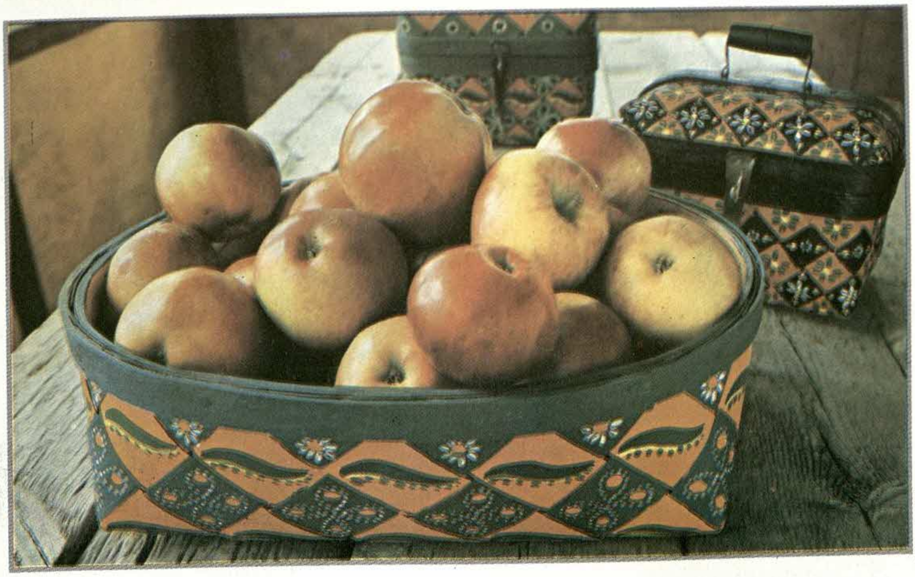
This tablecloth of cross-stitched squares is typical of folk embroidery.



The design from the museum sign was used as inspiration for this piece of embroidery. Many folk motifs lend themselves to this type of translation.

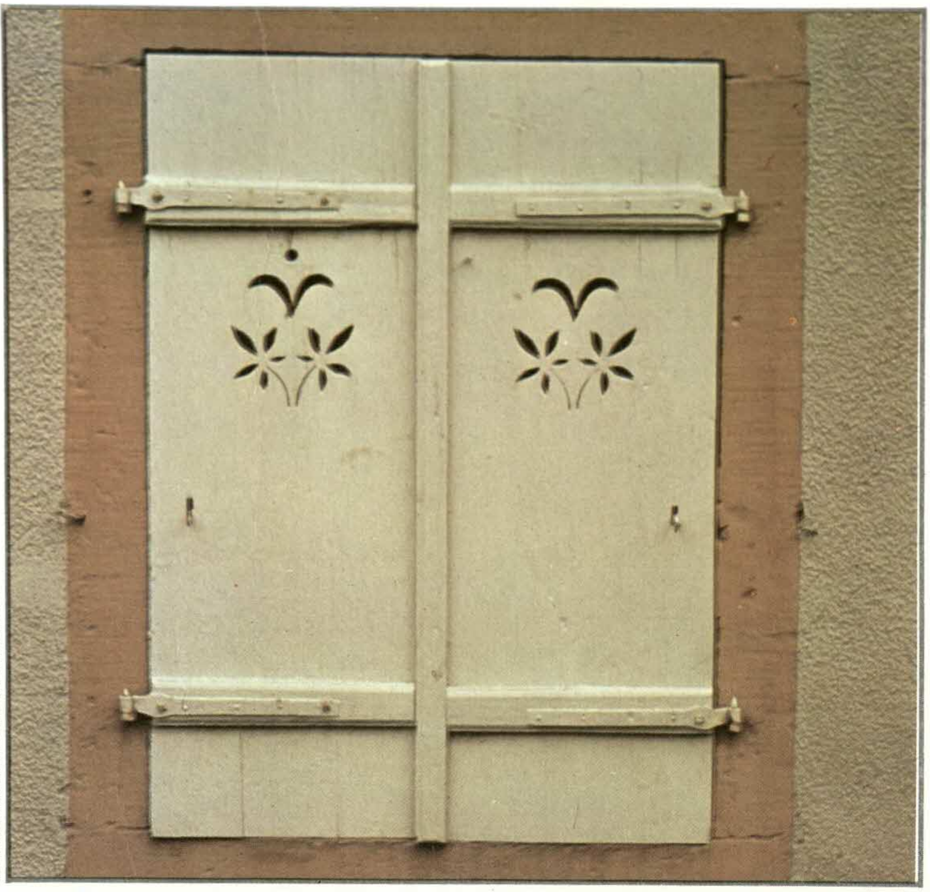
100 Idées de Marie Claire/Reichle





Key L nilson

Simple fruit panniers painted with folk motifs make unusual containers.



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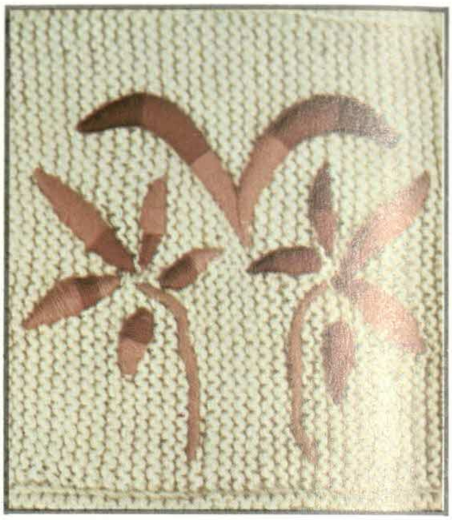
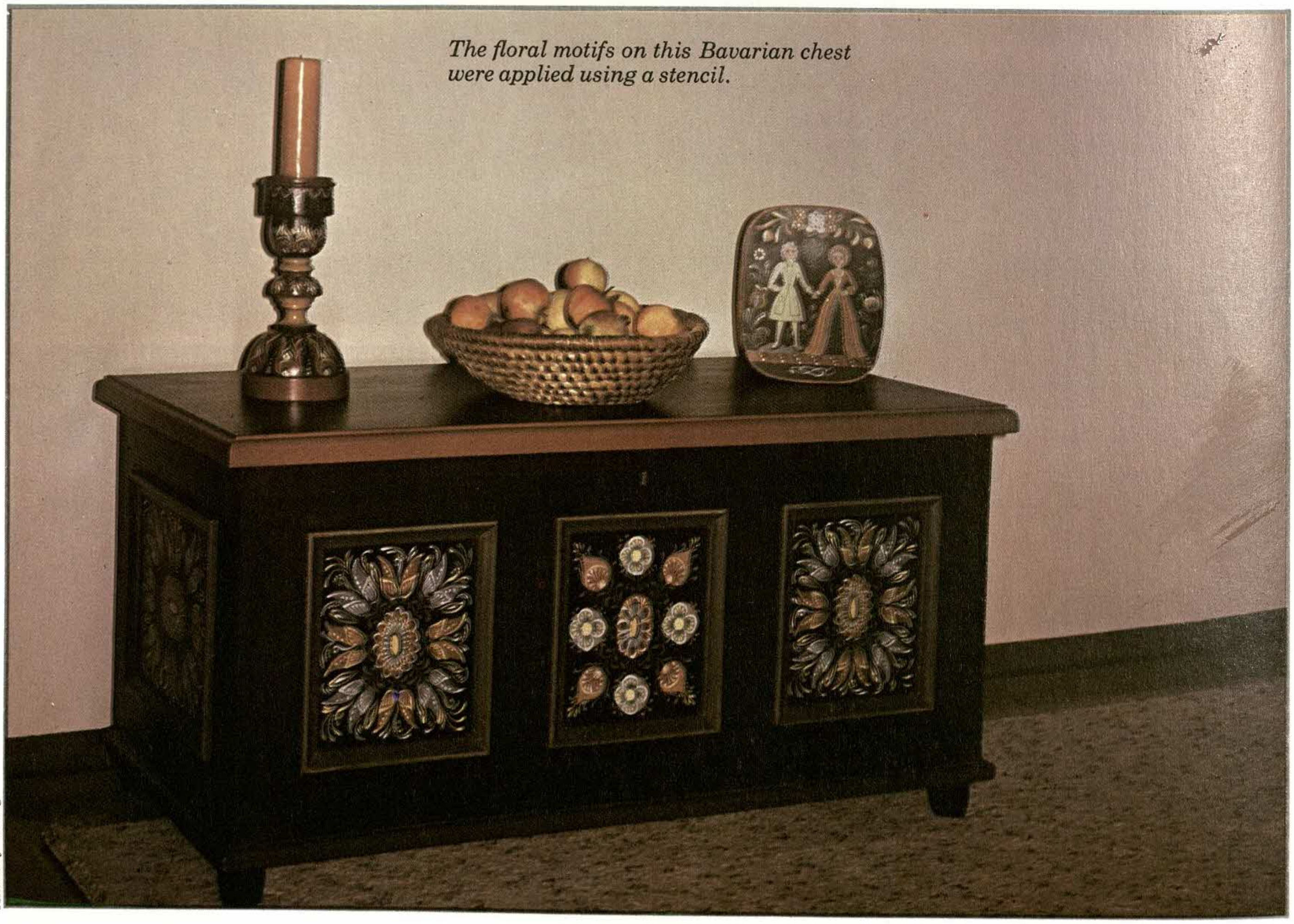


Left: shutters offer a variety of motifs that can be copied easily. The detail (above) is from a coverlet.

The walls of some peasant homes both inside and out were decorated with colourful floral designs, generally on a whitewashed background. These would either be painted or, alternatively, the inside walls were sometimes covered with embroidered or tapestry hangings. Tulips and roses featured frequently and in Switzerland the edelweiss was



The floral motifs on this Bavarian chest were applied using a stencil.

Anthony Verlag

prominent.

Choose a motif and transfer it on to a suitably sized stencil (Stencils chapters 2 and 3, pages 240 and 270). This can be used to decorate almost any room in the house. The same motif can be stencilled on to aprons, tea towels and other kitchen equipment.

Conventionalized flower designs were also used to decorate furniture and furnishing accessories such as candle holders, spice boxes and trays. Sometimes the flower designs were carved but more often they would be painted. Wood carving along with embroidery was fundamental to peasant life.

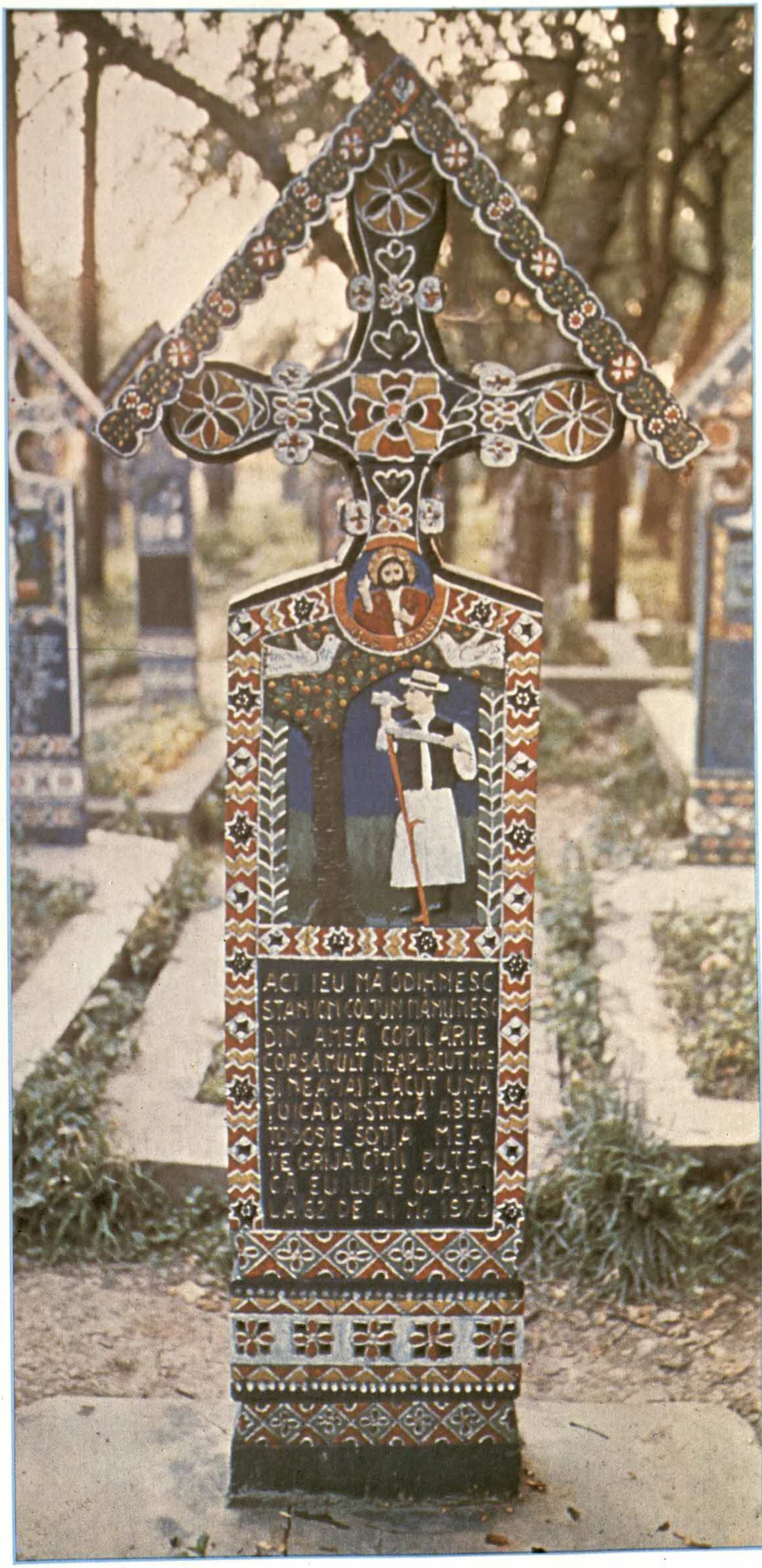
In the forested, hilly regions of Europe, houses would be made of wood and often intricately ornamented with carving. Windows would often be covered by wooden shutters, each one having a particular motif carved into it. The petal motif from the shutters illustrated, is a typical example and its interpretation on a knitted coverlet shows the versatility of design when a little imagination is added. The same motif could be embroidered on to a blouse or cardigan once a stencil or pattern of it has been made.

Folk costume was practically all embroidered. Vibrant, cheerful colours were used and the stitches were intricate and delicate. Stitches varied but the most common included cross stitch, satin stitch, running stitch and double running stitch. The embroidery was not only executed on cloth but also on leather and sheepskins which, in colder climes, were worn as overcoats. Today, using folk costumes as guides, it is possible to make exotically embroidered clothes to your own requirements.

Animals and humans did not feature in folk decoration until the 18th century. Wild ducks, stags and peacocks became popular and, even more recently, the peace dove.

Inn and shop signs would often include recognizable forms of people or animals to identify the premises as the majority of the customers could not read. Here again are translatable designs as the illustration on page 2423 proves.

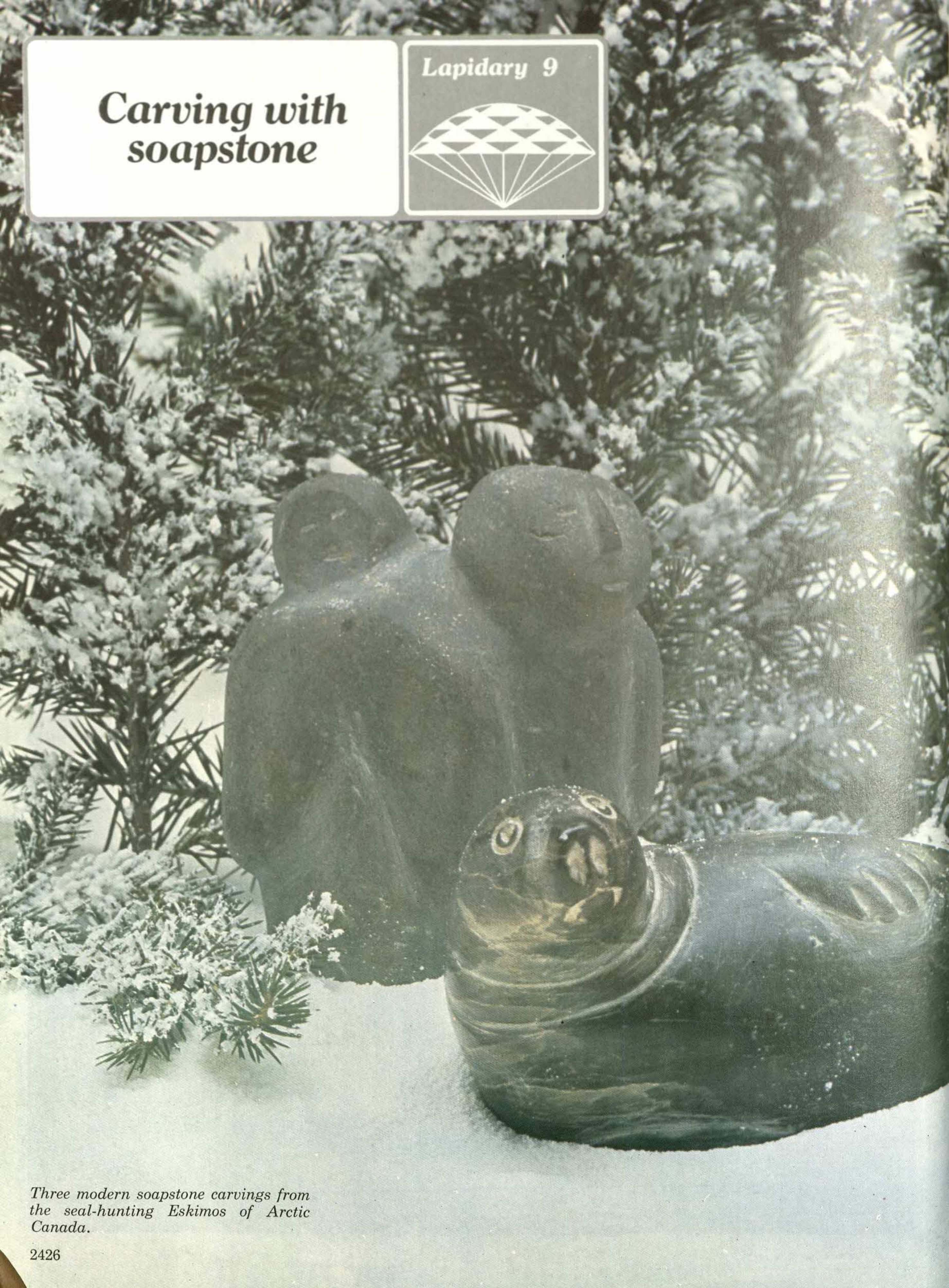
Another form of sign painting was that in Romania, where wooden gravestones were colourfully decorated with the so-called image of the deceased. The decoration would be finished with a border of hearts or flowers. Such motifs make attractive decoration if embroidered on to canvas satchels, bags or even aprons. Trace the design on to the cloth, then, using the original colours as a guide, select the necessary threads.



Graves in Romanian cemeteries are decorated with a brightly painted wooden plinth depicting the dead.

100 Idees de Marie Claire/Chabaneix

Carving with soapstone



Three modern soapstone carvings from the seal-hunting Eskimos of Arctic Canada.

Kim Sayer

Of all materials likely to be handled by the amateur lapidary, soapstone is probably the most unusual. It is also the easiest of stones to work with, the cleanest to handle, and the most versatile.

Soapstone (otherwise known as steatite) is a variety of talc and is one of the softest minerals known. It has a hardness of only 1 on the Mohs' scale (see Lapidary chapter 2, page 276), so that it can be scratched with a finger nail and can be carved easily with a penknife. It is possible to complete a carving in a few hours which in any other material would take days. Soapstone has a greasy appearance and little or no grain, though sometimes minute particles of iron in the stone mean that it must be carved carefully because the iron is much harder than the soapstone.

Soapstone occurs in a wide variety of colours, including brown, grey, yellow, green, red and white. It has virtually the same chemical composition as jade, but with a different physical arrangement. Consequently, soapstone exhibits all the familiar jade colours, such as 'mutton fat grey' and 'jade green'. In its unpolished state it has a powdery appearance and its basic colour will not show fully unless it is rubbed with a little oil or grease.

History

Soapstone carving has a long history: the wide variety of colour found in the stone has attracted the attention of artists and craftsmen since early times. Because it is so soft and therefore easily workable, soapstone has long been widely used by people with primitive technologies for carving statues, ornaments and cooking pots. It retains heat and becomes harder than jade if it is baked in a kiln, and it is for this reason that it has been used for making domestic utensils by people such as the Eskimos who also make beautiful soapstone carvings of Arctic animals.

Besides being used for all sorts of containers (such as cosmetic pots in ancient Egypt), soapstone has also been used for transferring designs. In Babylonian and Assyrian times cylinder and stamp seals were carved from it. Soapstone carving is a traditional craft in some parts of China where carvings for idols and flower vases in interesting shapes were produced during the Ming and Ching dynasties. Artists and calligraphers also painstakingly made seals which were intricately carved. In old Japan, the first text ever printed—an order for one million Buddhist prayers sent out by a pious empress—was carried out with soapstone printing blocks.

The craft of soapstone carving has

never died out in India, where very complicated and detailed decorative work of the highest quality is produced. The famous temples of Orissa are filled with ancient soapstone idols.

Quite recently soapstone has again become an important medium for sculpture. With the virtual extinction of the walrus which provided ivory for their carvings, the Eskimos have been encouraged to make their carvings in soapstone instead. For the past thirty years they have been producing beautiful carvings in both modern and traditional styles. They have also been making soapstone printing blocks.

Where to find soapstone

Soapstone is found in many parts of the British Isles, usually in combination with serpentine. It is mined at Lizard Point in Cornwall, Anglesey in Wales, Portsoy and Uist in Scotland, and in a number of places in Ireland such as Connemara.

North America has extensive deposits, mainly in the east and in the Arctic regions of Canada (which is why the Eskimos have used this material so much).

Soapstone of very high quality can be obtained from Barberton in the Transvaal, in South Africa. Very good soapstone is also found in Rhodesia and Malawi, where the old tradition of soapstone carving has now been revived.

If you live near any of these areas, collect materials from rock falls and cliff faces. A local rock hunting club will be able to direct you to a quarry.

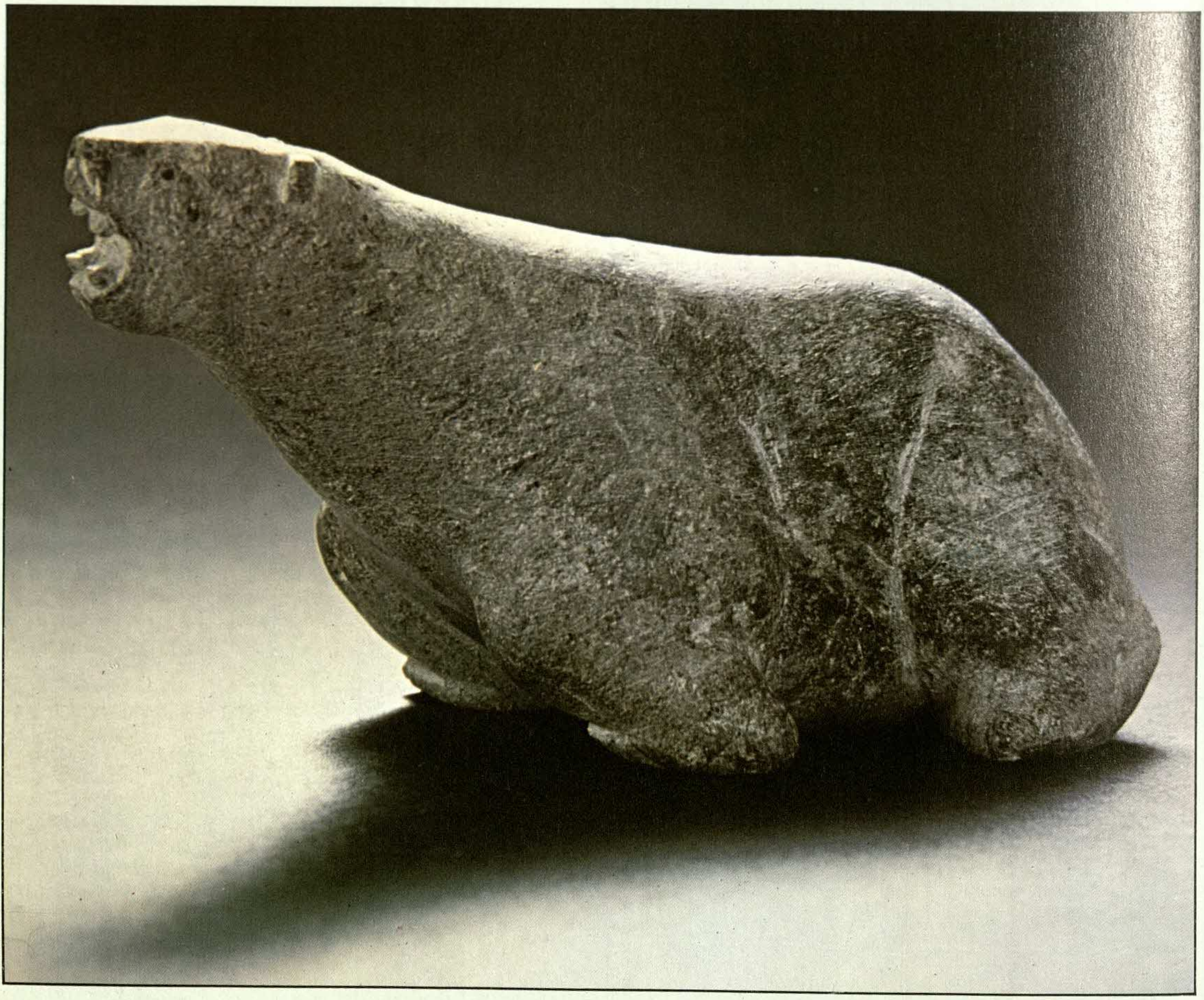
If you do not live near a quarry, buy soapstone from a rock shop; most of what you buy will come from Barberton. Buy the largest sizes you can obtain; the offcuts can always be used for smaller projects. Small but irregular blocks may be used for carving animal or human figures, for chessmen, or whatever the shape suggests to you.

Carving soapstone

Soapstone can be carved with an ordinary penknife if the piece of stone is fairly small. For larger pieces, wood worker's tools may be used; a hack saw is particularly useful. A hack saw blade about 2.5cm (1″) wide, which has teeth on both sides so that it can be reversed, produces a steady cut. The stone may also be drilled with a small bit (which is much more difficult to do with any other lapidary material) and turned on a lathe.

Begin working with soapstone by making a small, simple object such as a paper-weight. Hold a block of stone in a vice and, with a hack saw, saw off a piece measuring about 10cm x 10cm x 2.5cm (4″x 4″x 1″), to make a paper-weight which is heavy enough to hold down papers but not so large as to be clumsy.

Having obtained the basic shape required (having first drawn the shape on the surface of the stone with a pencil), the piece can then be further shaped and smoothed. Use a Surform



Polar bear carving made from potstone, a granular variety of soapstone found in many parts of Greenland.

Camera Press

tool, a craft knife or a file such as a riffler file, and then coarse and fine grades of glasspaper.

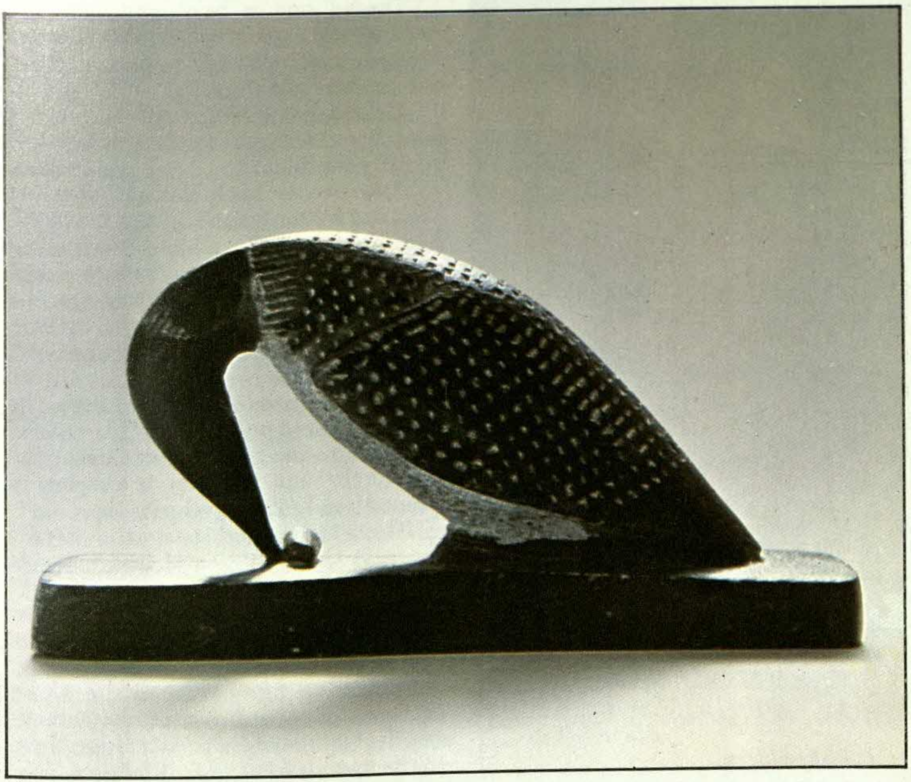
Polishing

Having carved and shaped a piece of soapstone, and sanded it down to a smooth matt finish with sandpaper, it may then be polished, or painted with two coats of clear polyurethane varnish for a quicker method of finishing.

If you possess a lapidary buffing wheel you can polish the stone with it, using the laps and grits described in Lapidary chapter 6, page 2002. If you polish the stone by hand, there is a large number of polishing agents which will give the stone a high gloss and bring out the colour.

When applied to soapstone, all polishing agents should be used with oil. The Eskimos use whale's blubber, but good alternatives are linseed oil or sweet oil such as almond oil or olive oil. The oil should be mixed with the polishing agent and applied with a cotton rag.

Begin polishing a piece of stone with emery powder (which is also known as ruby powder or crushed corundum), and then continue with powdered pumice, Bath brick or rotten stone (which is decomposed silicious limestone). Finish with plate powder (which is usually used for cleaning silver), cerium oxide, crocus powder (a peroxide of iron) or precipitated chalk.



The stylized bird sculpture from Greenland has been dipped in melted candle wax and then polished to make it smooth.

Camera Press

Steve Bicknell

Small offcuts of soapstone can be used for line engravings. The material is so soft that it can be shaped and carved with ordinary files and a penknife..

Line engraving

One of the many fascinating things you can make from a piece of soapstone is a line engraving. All that is needed is a flat piece of soapstone, even an odd scrap which might otherwise be wasted. Smooth it down on one side with files, the edge of a craft knife and glasspaper. To engrave a design on the surface of the stone, use a wood-engraver's veiner. The design should be composed of fine lines which will show up as white lines in the print which is made from the engraving.

You will need:

Prepared soapstone block.
Piece of carpet underlay.
Wood-engraver's veiner.
Black printer's ink and roller.
Piece of plate glass.
A sheet of newsprint or thin paper.
Pencil, cotton wool and cloth rag.

☐ Place the piece of soapstone, smooth side uppermost, on a piece of carpet underlay spread on your work surface.

☐ Draw the design on the soapstone with a pencil, then cut round the line with the veiner. Press one hand against the other to prevent the veiner moving too fast, and wiggle the tool a little from side to side as you cut through the stone.

☐ Squeeze some printer's ink on a glass plate, roll it in two different directions with a printer's roller until it is the right consistency, and then roll it on to the soapstone block.

☐ Take a sheet of newsprint or other thin paper of the appropriate size, which has been dampened slightly. Lay the paper on the stone block and rub it down over the stone with a small ball of cotton wool rolled up in a cotton rag. Carefully remove the paper.

The incised lines of your engraving should now stand out in white against a black background.

You could also make a block print from soapstone by cutting out the design so that it stands up out of the stone rather than being sunk in, and make a print from the block as for engraving.

Bead weaving by hand

Beadwork 10

There are two types of bead weaving—on a loom and by hand. Bead weaving on a loom creates flat strips, bead weaving by hand creates a strip or circle of beads that will curve round a shape. In this first chapter on bead weaving, the latter is discussed.

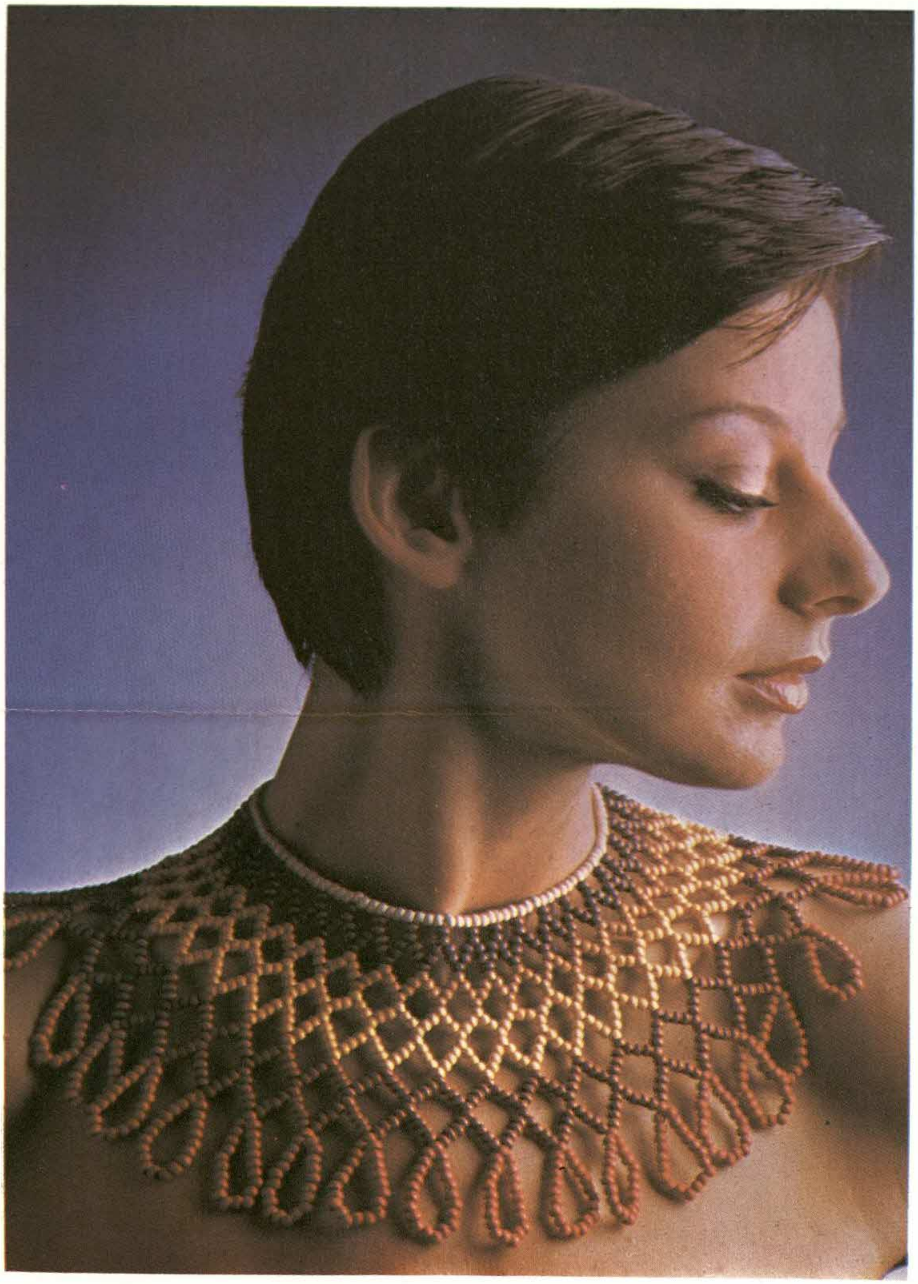
Weaving contours

The simplest type of hand bead weaving involves making long strips which can be used for necklaces, edgings for collars and cuffs etc.

This method starts with a string of beads as long as you want the finished beadwork to be, and then a series of loops is attached to the beads, and to each other until the piece is finished (fig.1).

If the piece is the wrong length when finished, it can easily be shortened or lengthened by adding on or taking away from the initial string of beads. Many different patterns can be created by using different coloured beads and changing the zigzag pattern (fig.2).

The zigzag pattern created by the loops becomes larger towards the outside edge and this makes the curved contour which is suitable for such things as the curved edges of a collar, or to make the necklace shown here.



The beadwork necklace curves gently over the shoulders.

Steve Bicknell

The necklace

This necklace fits round the neck and curves out gently to follow the neckline. It is made using the bead weaving method just described.

You will need:

Matt, coloured wooden beads, 4mm ($\frac{1}{8}$") diameter—120 cream, 280 wine red, 240 burnt orange, 520 yellow, 530 rust brown, 770 red. (These figures are approximate.)

Strong cord.

Beeswax.

Beading needle size 10.

1 necklace fastener.

In the instructions the beads are described as: **c**=cream, **w**=wine red, **o**=burnt orange, **y**=yellow, **b**=rust brown, **r**=red.

The first row. Thread the needle with a long double thread and rub it with beeswax to prevent it tangling.

☐ Tie a knot at the end of the thread.

☐ Thread one **c** bead and pass the needle through the double thread between the knot and the bead and pull the thread tight (fig.3).

☐ Thread enough **c** beads to make a rope long enough to fit comfortably round your neck.

☐ Pass needle back through the last bead but one and pull tight.

The pattern. The loops are attached after every third bead on the rope and connected to each other to form the zigzag pattern.

☐ On to the same thread, thread 5**w**, 4**o**, 9**y**, 10**b**, 21**r**.

☐ Pass the needle back through the first **r** bead and pull firmly.

☐ Thread 9**b** beads, and pass the needle through the first **b** and last **y** beads already strung (fig.4).

☐ Thread 7**y**, and pass the needle through the first **y** and last **o** beads already strung (fig.5).

☐ Continue by threading 3**o** and 3**w** beads and passing needle through the first 2**w** beads threaded.

☐ Following fig.6, pass needle along 3**c** beads of rope and continue threading next series of loops attaching them to the first.

Camera Press

These two purses were made using the same bead weaving techniques.

To renew a thread fasten the old thread back into the necklace by making a series of slip knots. To do this make a circle with the thread, then pick up inside the circle the thread which lies between the thread you have just come out of and the thread you are going into (fig.7).

☐ Pass the needle through two more beads and make another slip knot. Then pass the needle through two more beads and cut off the thread.

☐ Dab the slip knots with some colourless nail varnish so that they stay in place.

☐ Continue attaching loops to the necklace until you reach the end of the rope.

To finish off. Pass the thread through the last **c** bead of the necklace and then attach the fastener.

☐ Finish off the thread by making a series of slip knots back into the necklace.

☐ Sew the other part of the fastener to the other end of the necklace. Using this basic construction but changing the colour arrangement of the beads can produce many different patterns.

Weaving in the round

Weaving in the round is another form of bead weaving by hand. The weaving is done in a series of circles which are joined together in a zigzag pattern. The finished result looks very similar to the contoured bead weaving already described but is woven in a circle, whereas the necklace is woven in a long strip and the two ends joined together.

This type of bead weaving can be used to make such things as table mats or the lampshade cover shown overleaf. The first row of this type of bead weaving consists of a simple circle of beads (this can be as few as four beads) to which is attached a series of circles radiating out from the central circle in a zigzag pattern (fig.8).

Shaping. If you are making a table mat, you will want it to lie flat on the

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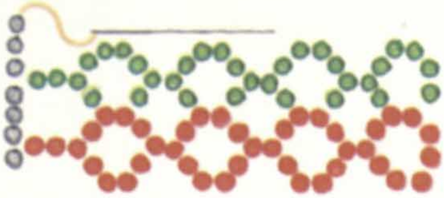

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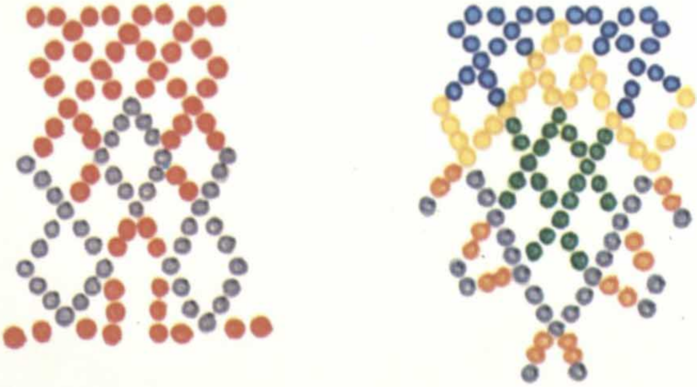

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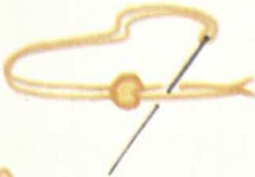
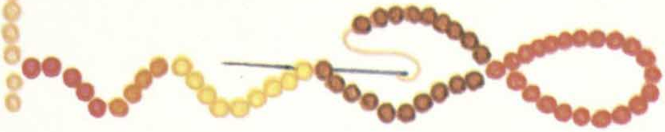


1. *Basic bead threading construction.*
2. *Two repeat patterns showing how the shape and colours can be varied.*
3. *Securing the first bead on the chain.*
4, 5, 6. *Stages in the construction of the bead necklace.*

4



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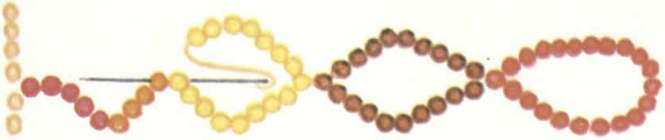

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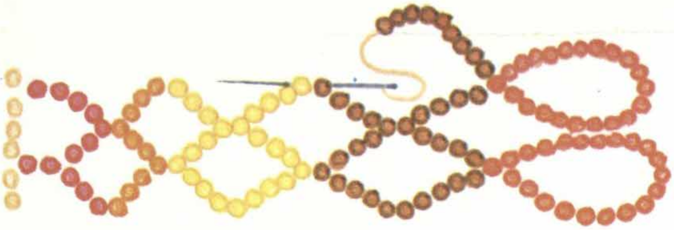

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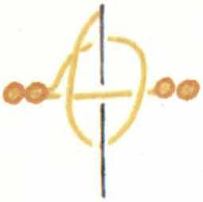

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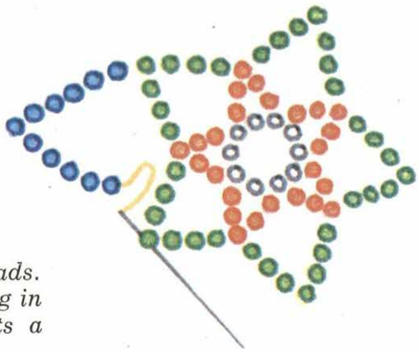
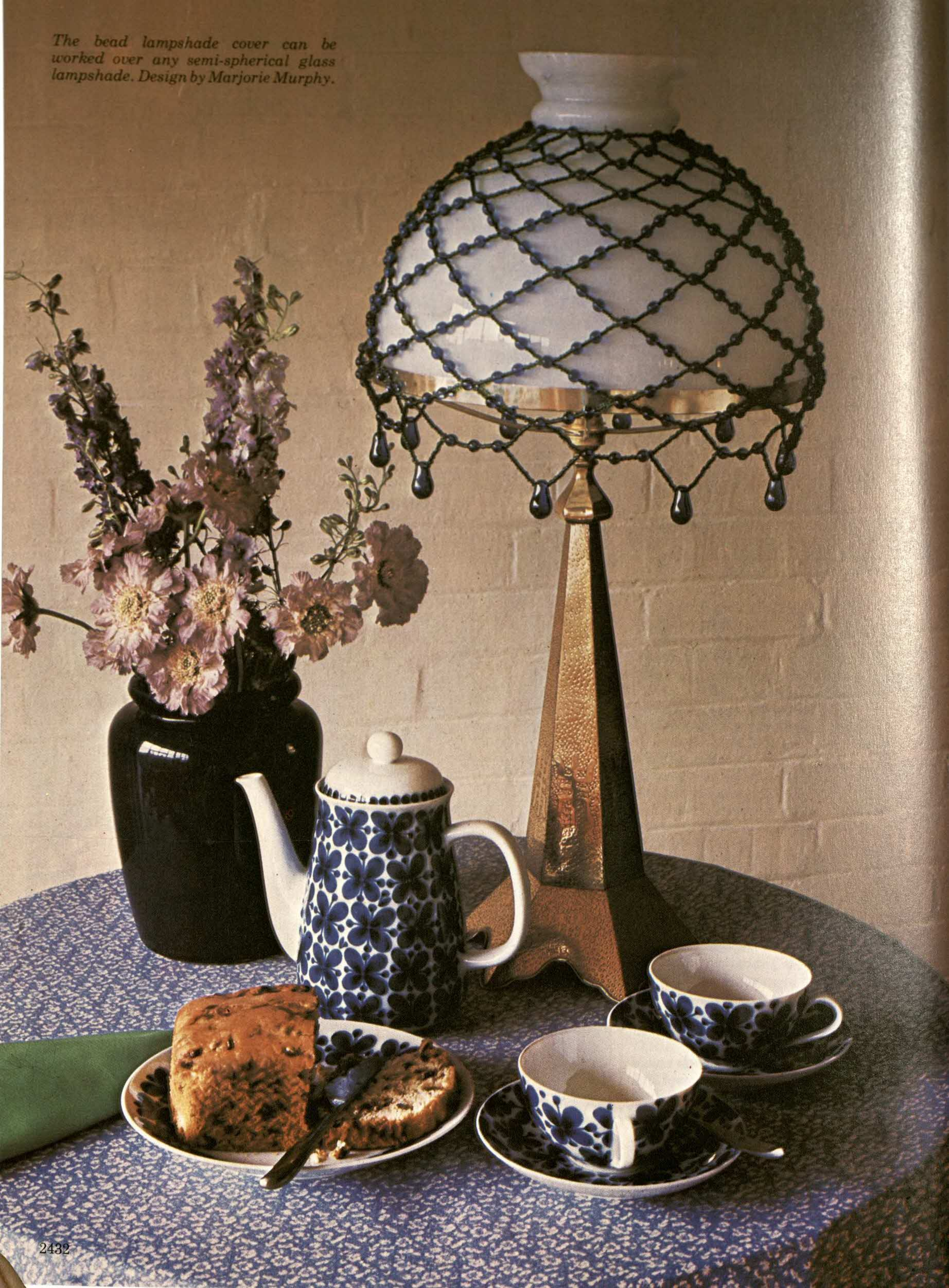


7. *Making a slip knot between two beads.*
8. *The basic construction of weaving in the round. Each colour represents a different row.*

The bead lampshade cover can be worked over any semi-spherical glass lampshade. Design by Marjorie Murphy.



table, in which case the work should be done on a flat surface and the number of beads increased as necessary to obtain a flat shape.

If you are making a shaped object, such as the lampshade cover, the number of beads must be adjusted to make the cover follow the shape of the lampshade. Because the zigzag construction makes the beadwork quite flexible, the shape of the cover need only be the approximate shape of the object in order to get a good fit.

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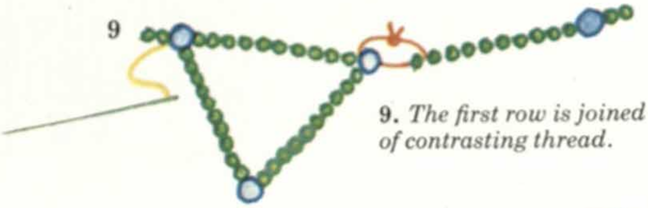
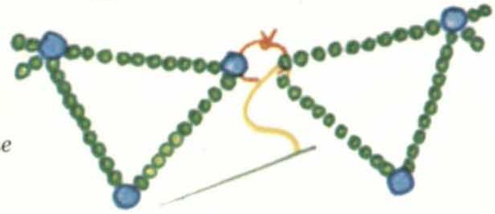


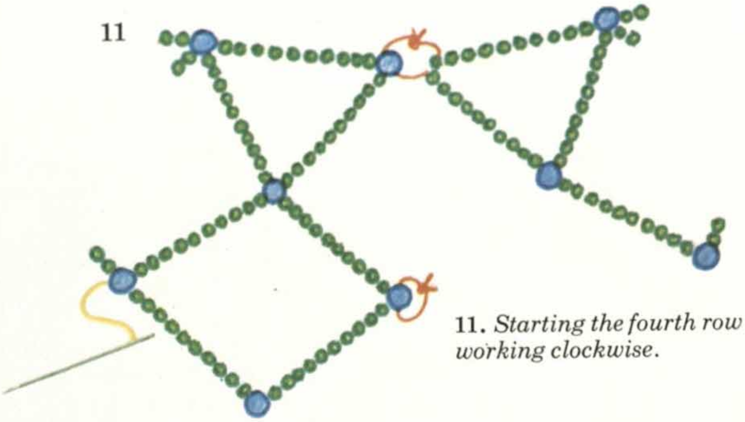
9. *The first row is joined up with a piece of contrasting thread.*

10



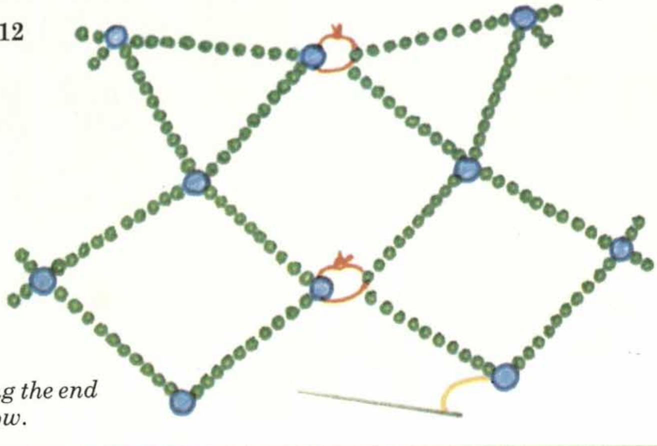
10. *Finishing the second row.*

11



11. *Starting the fourth row working clockwise.*

12



12. *Working the end of fourth row.*

Lampshade cover

This lampshade cover is made to fit over a semi-spherical white glass lampshade 30cm (12") diameter 19.5cm (7½") high. In order for it to be positioned over the shade, a small opening must be left in the top of the lampshade cover.

You will need:

85gm (3oz) small beads (No.3 or slightly larger).

575 large glass beads 8mm (⅜") in diameter.

10 pear-shaped glass beads.

Strong cord.

Beading needle size 5.

The key for the bead sizes is: s=small, l=large.

The first row. Thread 10s, one **l** until you have a string long enough to go round the top of the lampshade, ending with one **l**.

You would generally thread the needle through the first bead to join up the two ends of the circle but, to allow for the opening, the needle is left dangling and the two ends joined up for the time being with a length of contrasting thread.

The second row (work clockwise). Thread 10s, one **l**, 10s, and then pass the needle through the next large bead on the first row (fig.9).

☐ Continue threading in this way until you have completed the circle. When you reach the end of the last zigzag do not pass the needle through the large bead on the first row, but through the small bead on the right (fig.10). This is to allow for the opening.

The third row (work anti-clockwise). Pass the needle back through the last 10s and one **l** which was threaded in the second row.

☐ Thread 10s, one **l**, 10s, and then pass the needle through the first large bead on the second row.

☐ Continue threading in this way all round the circle.

The fourth row (work clockwise). When the needle has passed through the last large bead of the second row, thread 10s, one **l**. Tie a short piece of contrasting thread through this bead —it will later be tied to the end of the fourth row. Then thread 10s, one **l**, 10s, and pass the needle through the large bead of the third row away from the opening (fig.11).

☐ Continue round the fourth row.

The fifth row (work anti-clockwise). When the needle has passed through the last large bead of the third row, thread 10s, one **l**, 20s, and pass the needle through the last large bead of the second row, down 10 small beads of the third row, and down 10 small and one large bead of the fourth row (fig.12).

☐ Tie the large bead with the contrasting thread to the tenth small bead (see fig.12).

On following rows the beadwork can now be worked round and round without leaving an opening.

☐ Thread 10s, one **l**, 10s for the 6th row.

On 7th and 8th rows thread 4s, one **l**, 2s, one **l**, 4s, one **l**, 4s, one **l**, 2s, one **l**, 4s.

Next 4 rows. 6s, one **l**, 3s, one **l**, 6s, one **l**, 6s, one **l**, 3s, one **l**, 6s.

Next row. Thread 15s, one **l**, 5s, one **l**, 5s, one **l**, 15s.

Last row. Thread 15s, one pear-shaped, 15s, and attach to the one **l**, 5s, one **l**, 5s, one **l** of the previous row.

☐ Cut the pieces of contrasting thread to make the opening and slip over the lampshade.

☐ Fasten the top of the opening and the third row with a piece of thread, tying the knot securely.

Herbal face and body creams

Home herbalist 7

It is possible to combine almost any herb into either a face or body cream, and once you have mastered the preparation of the basic creams it is worth while experimenting using your favourite herbs.

One great advantage of home preparations is that you know exactly what you have put into your potions and can adjust them to suit you personally.

For most of the recipes you will need to use the essential oil derived from the herb. Buying essential oils is expensive, but the quantities you will need are minute so the oil will last a long time.

Before embarking on making any face creams it is sensible to organize a face care programme bearing in mind your skin type.

Cleansing is the place to start any skin care system; next tone your skin using skin tonic then use nourishing cream.

Cleansing cream

A good basic cleansing cream is an investment. For extra cosmetic benefit add the herbal water you feel is best for your skin type to the cream (Home herbalist chapter 5, page 2262).

Basic cleansing cream

The cleansing agent in this cream is the lanolin.

Use this cream to clean your skin night and morning: apply a small amount, massage it well into the skin, then remove all traces with a clean tissue.

You will need:

14gm (½oz) beeswax (obtainable from dispensing chemists).
28gm (1oz) lanolin (obtainable from dispensing chemists).
85gm (3oz) avocado or olive oil.
28gm (1oz) herbal water (infusion of the appropriate herb).
2 drops of essential oil (for scent).
Double saucepan.

☐ Melt the wax and lanolin in a double saucepan over a low heat.

☐ When they are completely liquid stir in the oil.

☐ Remove the saucepan from the heat and add the herbal water and essential oil. Stir continuously until cool.

☐ Keep the cream in a screw-top jar

Lemon cleansing cream

A pleasant cleansing cream for those with a slightly oily skin can be made using fresh lemon juice.

You will need:

28gm (1oz) beeswax.
170gm (6oz) liquid paraffin.
½ teaspoon borax.
½ teacup of boiling water.
1 tablespoon fresh lemon juice.
Double saucepan.

☐ Combine the wax and paraffin in a double saucepan over a low heat. Stir well until the wax has melted.

☐ Continue stirring for five minutes.

☐ Add the borax which has been dissolved in the boiling water and continue to stir rapidly.

☐ Remove from the heat and continue stirring until the mixture is cool and the consistency of thick cream.

☐ Add the lemon juice still stirring.

☐ Pour into a screw-top jar and leave for two or three days before using it.

Cleansing milk

You may prefer to use cleansing milk rather than cream.

A mixture particularly good for oily, blemished skins is a teaspoon of oats soaked in 28gm (1oz) live yoghourt overnight. This mixture does not keep well so it should be made nightly for use the following day.

Before use add a teaspoon of lemon juice. Massage the mixture into your face very thoroughly; rinse off with warm water.

Dry skin cleanser

Rub this mixture on to your face, leave for three minutes and rinse off with warm water.

You will need:

28gm (1oz) live yoghourt.
1 egg yolk.
1 teaspoon almond oil.
1 teaspoon honey.
Oil of sweet fennel (to scent the mixture).

☐ Mix all the ingredients together and store in a refrigerator. This will keep for up to one week.

Long-lasting cleanser

This is also good for dry skins.

You will need:

1 tablespoon cocoa butter.
1 tablespoon lanolin.
½ cup avocado oil (available from health food shops).
1 tablespoon herbal water (see Home herbalist chapter 5).

☐ Melt together the cocoa butter, lanolin and avocado oil until they are completely dissolved and blended together.

☐ Add the herbal water and continue stirring until the mixture is cool.

Nourishing cream

Once your skin is clean and you have helped close the pores with herbal toners and fresheners (Home herbalist, chapter 5) you can apply nourishing creams.

Night nourishing cream

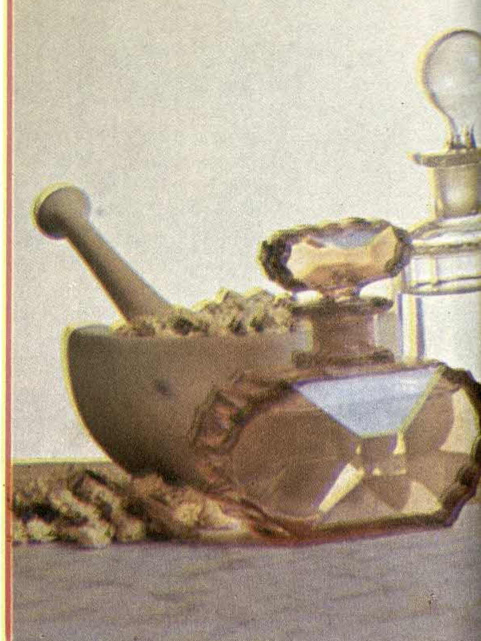
Use a very little at a time and leave it on your face overnight.

You will need:

57gm (2oz) beeswax.
28gm (1oz) cocoa butter.
70gm (2½oz) avocado oil.
57gm (2oz) distilled water.
1 desertspoon wheat germ oil.
¾ teaspoon borax.
Double saucepan.

☐ Mix the beeswax, cocoa butter and avocado oil in a double saucepan until they are completely dissolved and blended.

☐ Continue mixing, stirring well, and add the distilled water.



From natural herbs you can produce a variety of useful lotions and creams for both face and body. These can be made at home with very little effort.

Sandra Lousada

☐ Add the wheat germ oil and borax.
☐ Whip the mixture rapidly until it cools to prevent granules forming.

Almond nourisher

This is another pleasant night nourishing cream.
Use this cream very sparingly at night.
You will need:
1 tablespoon beeswax.
½ tablespoon lanolin.
1 tablespoon almond oil.
1 dessertspoon distilled water.
1 dessertspoon rose water.
Pinch of borax.
2 capsules of vitamin A.
2 capsules of vitamin E.

☐ Heat the beeswax, lanolin and almond oil in a double saucepan until they are completely dissolved and blended.

☐ In a separate pan dissolve the borax in the distilled water and rose water. While it is still warm, add the borax solution to the wax mixture, beating continuously until the mixture is cool.

☐ Open the vitamin capsules and whisk the contents into the cream.

Hand cream

The nourishing creams can be used on your hands but will prove a little heavy for day time. They are best applied at bedtime. For daytime use lighter hand creams are more pleasant.

Hand cream

This is good for chapped, red hands.
You will need:
57gm (2oz) cocoa butter.
57gm (2oz) almond oil.
3 drops mandarin or fennel essential oil.

☐ Melt the cocoa butter in a double saucepan over a low heat, add the almond oil and mix well.

☐ Add the essential oil and remove from heat. Continue stirring the mixture until it is cool.

Hand jelly

This is good for rough hands.
You will need:
1 teaspoon of gum arabic.
2 teaspoons of eau de cologne.
3 tablespoons glycerine.
6 tablespoons rose water.

☐ Mix together the glycerine and rose water.

☐ Dissolve 1 teaspoon of gum arabic in the eau de cologne.

☐ Quickly add the glycerine and rose water solution. Mix well.

A jelly will form, which is both soothing and pleasant to use.

Warning: highly scented creams are not good for sensitive skins; experiment with any cream on a small area of skin before embarking on a total skin treatment.

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More paper for craft work

Design know-how 82

This chapter continues the list of paper and card available for craft work.

Kraft paper. The word *kraft* means strength. Kraft paper is primarily designed for wrappings and carriers, but has many other applications. It is strong and foldable, and comes in white and a variety of colours. The white paper comes in a bleached form for a cleaner look, or unbleached in which case you tend to see bits and pieces in the surface.

Laid papers. When a laid paper is made, the mould consists of wires laid side by side which makes an impression on the paper. Paper that is made on a woven wire mould and has no such lines is called wove paper.

Lampshade parchment. This is a vegetable parchment which comes in a wide range of colours and weights.

London board. This is made from pasting together sheets of hand-made drawing paper. The surface is suitable for water based paint.

Manilla is strong flexible paper made from manilla hemp. It does not bleach easily and always comes in a brown or off white. It is good for making lampshades, especially if marbled.

Marbled paper and board. Marbling is a finish which can be done on machine or hand-made paper. It is mainly used for end papers in bookbinding. Marbling can be done on all types and qualities of paper and board.

Metallized paper and boards. These come in a variety of weights and can be printed with metallic inks or laminated with foil. Available in gold, silver or colours—bright or matt. They are malleable, but tend to crease.

Poster paper. Usually available from art shops, poster paper is coloured on one side only with a gloss or matt finish. Suitable for painting, origami and background colour work.

Pulp boards. These are at the bottom end of the board market (ivory board is at the top). They come in a range of thicknesses and colours and have a smooth surface. They are more difficult to fold than cover boards (see Design know-how chapter 81, page 2380) because the crease tends not to follow a clean line. It is helpful to smooth the crease into place with a blunt knife.

Release papers are silicon-coated papers that will not take colour. They are used domestically for keeping sticky things apart. A circle of release paper placed on top of paint in a tin before replacing the lid will prevent a skin forming on the paint.

Rice paper. This is not a true paper. It is made by cutting the pith of the *Fastia papyrifera* into fine sheets. It is edible and soluble and it makes a delicate backing for fine paintings.

Self-adhesive paper is designed for labels but can be bought in sheets of small sizes and many colours. Some are backed with a permanent adhesive —others have non-permanent adhesive which may be more useful because when it gets tatty you can peel it off.

Stencil paper. This is stiff paper which has been specially treated to withstand repeated applications of paint. It is quite expensive and is possible to improvise by sealing ordinary cardboard with varnish.

Strawboards. This is the cheapest type of board available. The straw from which they are made is clearly visible on the surface but it can be laminated.

Background: Japanese chiri paper.
Bottom: chigirigami (left), marbled paper, kotobuki and ichimatsu.

Sugar paper. This is a tough paper with a textured surface available in sheets or rolls. It is ideal for crayons, pastels, charcoal and poster colours.

Tissue paper. A soft delicate paper available in a wide range of colours—glazed or matt. It creases but can be ironed smooth. The colours tend to fade in bright light and if it gets wet, the colours may run. It is suitable for various paper crafts—flower making, pattern making—or as a vivid background for screen and block printing.

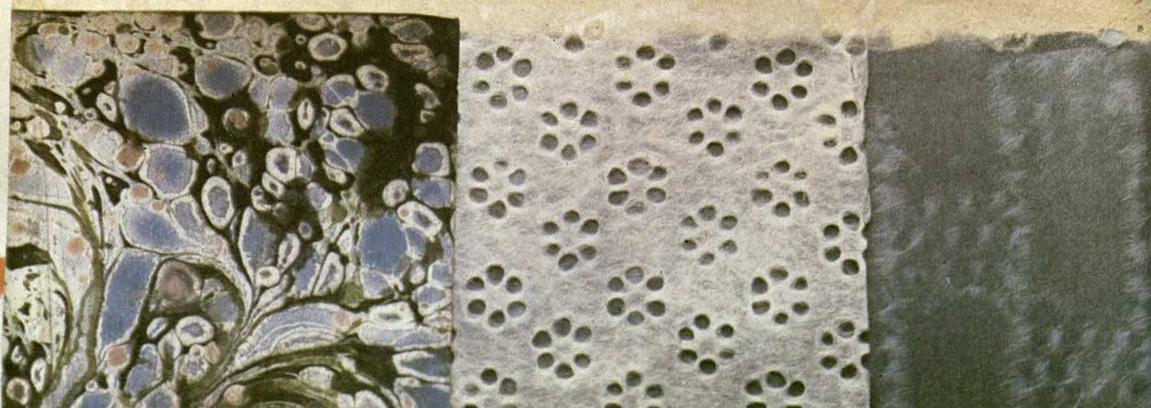
Tracing paper. This is better quality than detail paper (see previous Design know-how chapter 83), and more expensive. It has translucent qualities and is specially designed so that an erasure does not leave a mark.

Vellum paper is a natural cream colour rather than white. It has a smooth, good surface for writing on with ink. It is usually wove although laid vellum paper is also available.

Wallpapers. Some wallpapers do not stretch and can be rehung, others not. PVC wallpaper is wallpaper with a PVC coating.

Wove paper—see laid paper.

Writing papers. These are primarily designed for writing but can be used for printing and other purposes. The most expensive are the hand made papers—regrettably almost non-existent now. Then come the machine-made rag papers which are tub sized, ie the paper is totally immersed in a tub of size which gives it better printing potential. A cheaper variety are the all rag or high rag content papers which are air dried, ie dried by a special process which means that the paper will not gain or lose moisture from the atmosphere and, therefore, will not shrink or expand. Marbled paper is available in both laid and wove, and will take virtually any ink. Cheaper still are the high quality bonds, ie writing paper above 61g/m² (this refers to weight as explained in the previous Design know-how chapter). These have a smooth appearance and are usually water marked. Most domestic stationery comes in this field. The cheapest variety are the ordinary bonds and banks, ie less than 61g/m², which are the papers produced in great bulk mainly for office work.



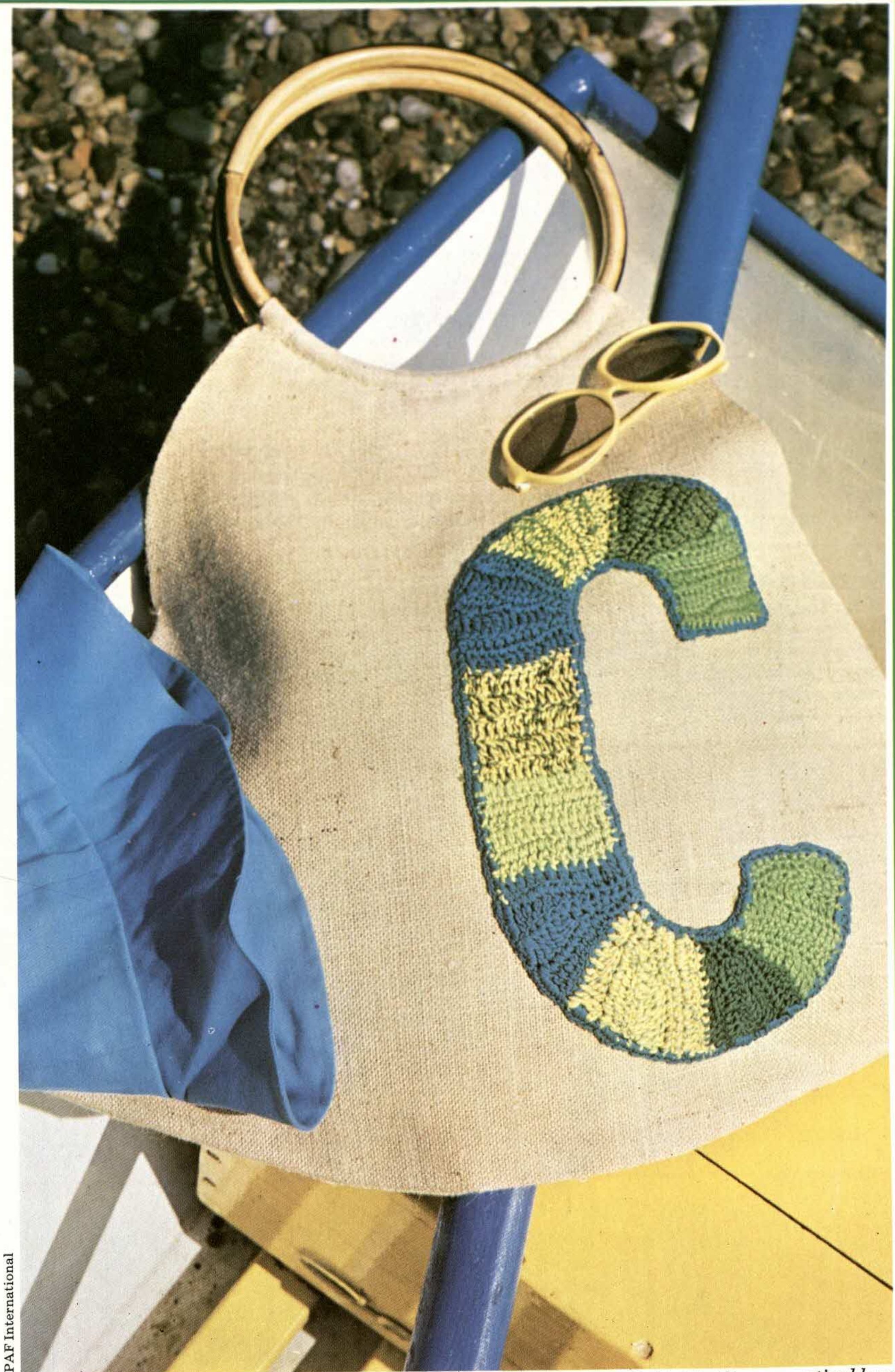
Paul Kemp

Creative ideas 87

Summer bag with motif
Sandwiches, swimsuit and suntan oil will all pack neatly into this lined canvas bag. A colourful piece of crochet about 33cm (13″) in length decorates it. For the bag itself, draw and cut out a pattern from newspaper first. Take into account the size of the bamboo rings which make the handles, and curve the top of the pattern to match. (The top edge of the canvas is folded and stitched over the rings.)

Sew together bag and lining separately, leaving about 18cm (7″) open at top of each side. Insert bamboo rings. Do not sew lining into bag yet.

To crochet motif you will need:
One No.3.00 ISR (US size F) crochet hook.
Crochet cotton in apple green, dark green, yellow and dark turquoise.
For treble stitch (tr) see Crochet chapter 1, page 36.
For double crochet (dc) see Crochet chapter 2, page 94.
As green and yellow are used together in part of the pattern use two strands of the single colours together for a consistent thickness.
Using apple green cotton, make 13 chain stitches.
1st row. 1dc into each ch to end. 12 sts.
Work 4 rows tr.
Next row. 7dc, 5tr.
Next row. 5tr, 7dc.
Next row. 7dc, 5tr.
Next row. Using dark green 7tr, 5dc.
Next row. 5dc, 7tr.
Rep last 2 rows once more.
Next row. Using yellow and apple green 8tr, 4dc.
Next row. 4dc, 8tr.
Rep last 2 rows once more, then first of them once.
Next row. Using turquoise 4dc, 8tr.
Next row. 8tr, 4dc.
Rep last 2 rows twice more.
Using dark green and yellow work 5 rows tr.
Using apple green, work 4 rows tr.
Using turquoise work one row tr.
Next row. 5dc, 7tr.
Next row. 7tr, 5dc.
Rep last 2 rows once more.
Using yellow and apple green, rep last 2 rows 3 times more.
Next row. Using dark green 4dc, 8tr.
Next row. 8tr, 4dc.
Rep last 2 rows once more, then first of them once.
Next row. Using apple green 8tr, 4dc.
Next row. 4dc, 8tr.
Using apple green, work 4 rows tr and one row dc.
Break off yarn.
Centre motif on canvas front and slip-stitch in place.
To complete bag, place lining inside canvas. Match seams and stitch in place—attaching top edges of lining to bag just under handles.


PAF International

Individualize a practical bag with a bright motif.

First steps in kite making

Paper 63

No one knows who flew the first kite or why. According to tradition, kites were invented by the Greek scientist Archytas of Tarentum about 400BC, but they are known to have been flown in China some 600 years earlier. Since then, kite flying has become a national pastime in Korea, Malaya, China and Japan, and it is from these countries that the prettiest designs have come.

Probably the easiest shape for the beginner to start with is the cutter kite, an elongated diamond shape with a tail. It can be made in under an hour and decorated in many different ways.

Choosing the materials

Surprisingly, there is no need to bother unduly about the weight of a kite unless it is to be flown in very light winds. Choose any paper you like for the cover—heavy papers such as cartridge or wallpaper; medium weights such as decorative wrapping papers, posters or shelf paper; or lightweight papers such as tissue. Crepe is probably the only unsuitable paper because of its tendency to stretch.

The sticks for the frame can be garden canes, balsa or pine battens, dowels or even twigs. Split thicker, heavier sticks lengthwise with a sharp kitchen knife to make them lighter.

Balance is more important than weight, so shave off any knots or thicker sections. To test for balance, mark the middle of the stick and balance it across the back of the knife blade. If one end dips, shave a little off it.

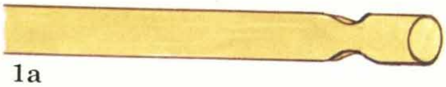
Making and decorating cutter kites is only part of the enjoyment—flying them will amuse the children for days.

Cutter kite

Scale the size of this kite up or down as you wish, according to the size required. The important part is the proportionate length of the sticks; *the longer stick should be half as long again as the shorter one.*

You will need:

Two sticks, one 61cm (24″) long and the other 91cm (36″) long.
Large sheet of paper for the cover.
Small ball of thin string or strong thread.
Glue or sticky tape.
Scissors and craft knife.
Pencil and ruler.
Curtain ring.
Poster paint and brush (optional).
Scraps of coloured paper or streamers for the tail.
Flying line and reel.



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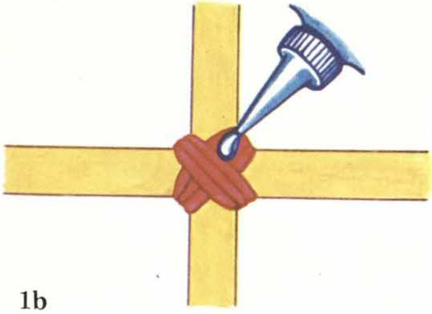
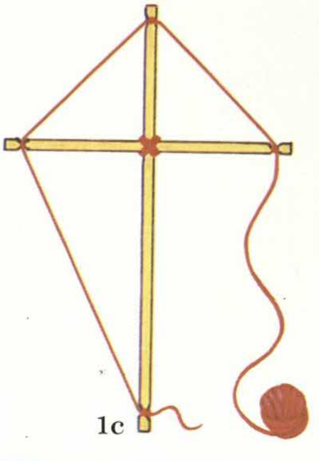


1b



1c

The frame. First cut two small notches, each about 6mm (¼″) in from each end of both sticks (fig.1a).

☐ Make a mark at the centre of the shorter stick and a mark one third of the way along the longer one.

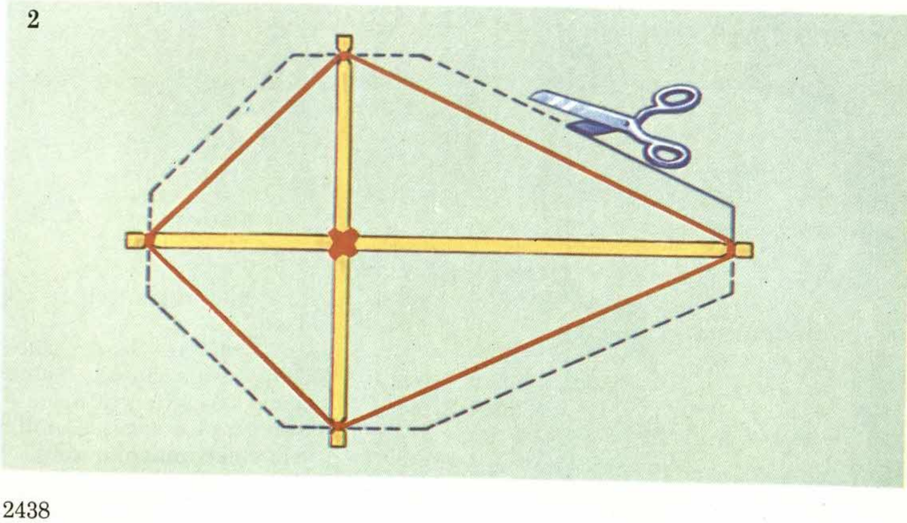
☐ Lay the sticks across each other at right angles, the marks touching, and bind the join tightly with thread.

☐ Put a dab of glue on the join for extra strength (fig.1b).

☐ Tie a piece of thread to the notched end of one of the sticks and take it across to the other sticks in turn, winding it tightly around each notch two or three times (fig.1c).

☐ Tie the ends to complete the frame.

2



The cover. Lay the frame on the wrong side of the sheet of paper and cut round it, cutting about 2.5cm (1″) outside the string (fig.2).

☐ Trim off the corners of the paper (see fig.2).

☐ Fold the edges of the paper up over the string and stick them down with glue or sticky tape.

Decoration. Turn the kite face up, with the frame underneath, and decorate the front by painting it or by pasting on paper shapes.

Keep the design simple and the colours bold, because details will be lost when the kite is in the sky. A bold motif cut from a poster, or even the poster itself, would make an 'instant' decoration.

Coral Mula

Jerry Tubby

Bridle. This is the name for the strings which hold the kite at the correct angle to the wind and to which the towing line is attached. The cutter kite has two pieces of string or thread making a double bridle.

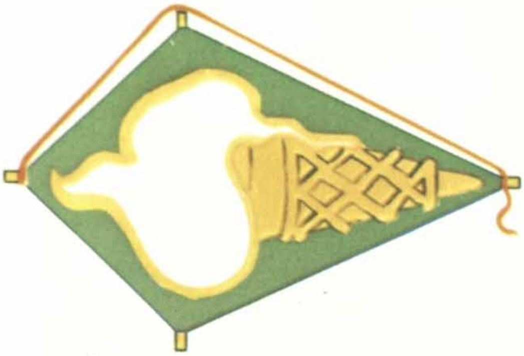
☐ Lay the kite on the table, decorated side uppermost.

☐ Take a piece of thread long enough to reach round one short and one long side of the kite with just a little to spare. Tie the ends to the notched ends of the vertical stick where they jut out beyond the cover (fig.3a).

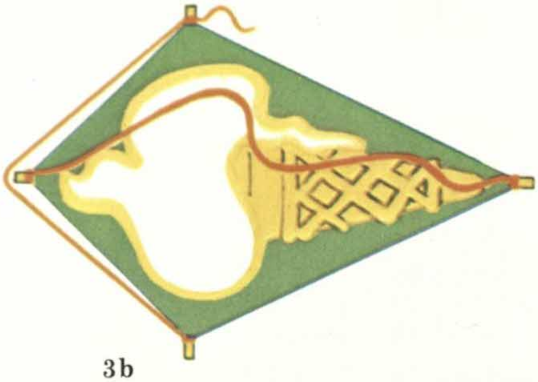
☐ Tie the second bridle to each end of the horizontal stick. This time the piece of thread should be twice the length of one of the short sides of the kite, with a little to spare (fig.3b).

☐ Loop the curtain ring on to the long bridle (fig.4) about one third of the way down it, and then on to the centre of the short bridle.

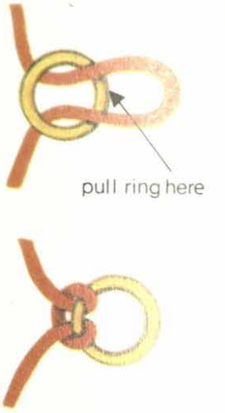
☐ Test the balance of the kite by holding it above the table by the ring. The two sides should be equidistant from the table and the kite itself should hang at an angle of about 45° to it. If necessary, adjust the angles slightly by slipping the ring along the bridles.



3a



3b



4

Tail. Some kites will fly well without any kind of tail, but the cutter kite needs one at least three times its own length. Make it from long paper streamers, or make the traditional kind of tail by knotting rectangles of paper on to a length of string.

☐ For a traditional tail, use pieces of paper about 15cm x 6cm (6″x 2½″) and set them about 8cm (3″) apart along the length of string. Attach them by means of a slip knot.

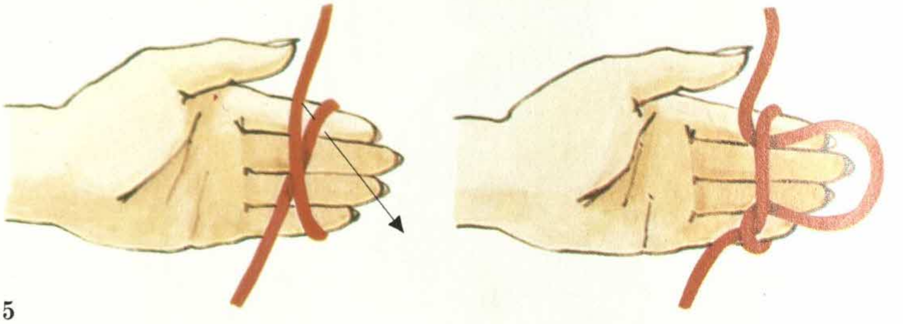
☐ To do this, wind the string over your hand to form a loop (fig.5).

☐ Make a twist in the centre of one of the pieces of paper and then insert it through the loop.

☐ Pull the ends of the thread tight.

☐ Repeat along the length of the string to form the tail.

☐ Tie the tail to the stick at the bottom of the kite.



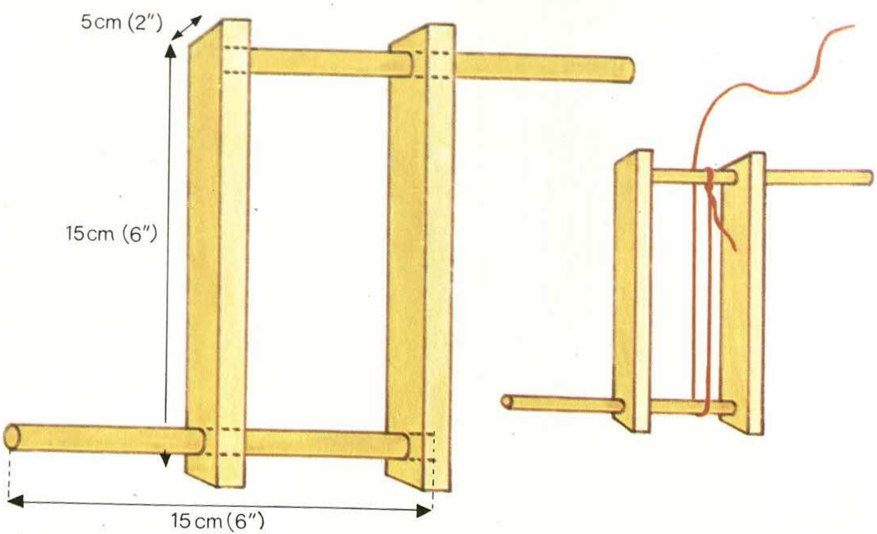
5

Flying-line and reel. Before you can fly the kite you need a flying-line and reel which can be bought quite cheaply from toy shops or some sports equipment shops.

To make your own flying-line, use about 60 metres of light nylon, Terylene cord or fishing-line and wind it on to a length of strong cardboard tube to act as a reel.

If, on the other hand, you want to make your own reel, you will need two rectangles of plywood, about 15cm x 5cm (6″x 2″), two pieces of dowelling about 15cm (6″) long, a drill and strong glue. Drill two holes in each of the two pieces of plywood, to the same diameter as the dowels, and assemble the reel as shown in fig.6, gluing each dowel into place.

Tie the end of the line firmly to the reel and wind it on tightly. The other end of the line should be tied to the kite's bridle or towing-ring.



6

Coral Mula.

Flying a kite

Do not assume that you need to wait for a really windy day in order to try out your kite. On the contrary, a gentle but steady breeze is all you need, and too much wind can damage a kite. If the tree tops are bending, then the wind is too strong for kite flying.

Always take a pair of gloves with you to stop the line cutting into your hands.

Where to fly a kite. Choose a large open space, such as a field or park, and keep well away from trees or telegraph poles.

It is not at all necessary to fly a kite from a hill, but if you wish to do so, stand on the windward side about 20 metres (just over 20 yards) from the top so as to take full advantage of the steady updraught. If you stand right on the summit the kit will be caught in the turbulence of conflicting air streams and will be more difficult to fly.

Launching and landing. Stand with your back to the wind and hold the kite by the towing-ring at arm's length. Have the reel on the ground at your feet.

☐ Wait until the wind lifts the kite and then release it, letting the line slip out through your fingers.

☐ If you have a helper, ask him to stand a little way in front of you holding the kite tilted slightly forwards until the wind lifts it out of his hands. Do not let him throw it into the air and do not try to run with it yourself. Neither will help to set it aloft. Make the kite rise by pulling on the line.

☐ Grip the line at arm's length and bend your forearm right back at the elbow, still gripping the line.

☐ Straighten your arm again slowly, letting the line slip through your fingers as you do so.

☐ Continue pulling and letting out the line until the kite is high in the sky.

☐ Land the kite simply by winding in the line.

☐ If it is pulling strongly, walk towards it as you wind.

☐ If you have a helper, he can put his hand over the line and walk towards the kite, pulling it down gradually while you wind in the line.

Watch out for any spectators appearing in front of you, as a kite may often crash as it comes in low and could be dangerous.

Repair kit. It is a good idea to take along with you a shoulder bag or satchel to carry a small repair kit made up of a reel of sticky tape for mending torn paper, several sewing needles that can be taped to broken struts to act as splints, and a pair of scissors for cutting tangles out of the line. Take an extra piece of tail as well.

The sky's the limit but the pleasure is inexhaustible.

Jerry Tubby

Correcting faults

There are several common faults, which are easy to correct, thus making all the difference to successful flying.

If the kite will not rise, it is probably flying too flat to the wind. Move the towing-ring a little higher. If the tail is hanging down rather than streaming out behind, then shortening the tail may help the kite to rise.

Fluttering and dipping. The kite may be flying too close to the wind. Move the towing-ring down a little.

Spinning, diving and looping the loop. The kite needs a longer or heavier tail. This is a common fault.

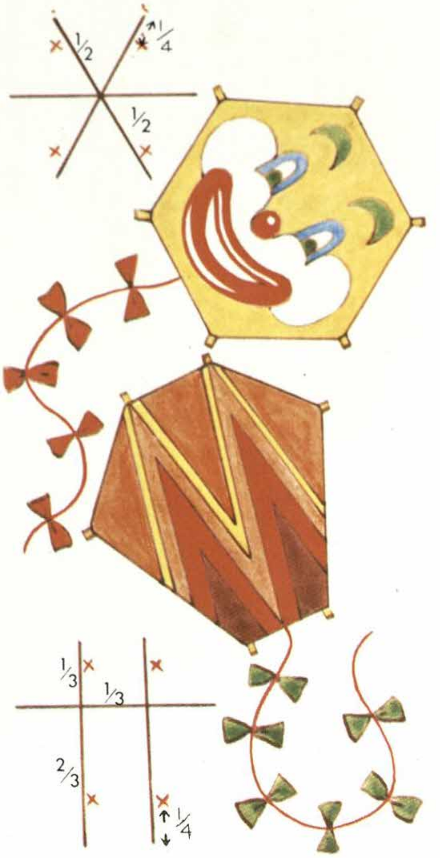
Falling consistently to one side. Tape a small weight—a tiny piece of twig, perhaps—to the back of the kite on the opposite side.

Safety note

Believe it or not, kite flying can be dangerous. Be sure to remember these two important points.

Kites can act as lightning conductors, so never fly a kite in stormy weather, or with a wire line, or with a wet line of any description.

Kites can be a real hazard to aircraft. By law you must be at least 5km (4 miles) away from the nearest airfield and you may not fly the kite higher than 60 metres (200ft).



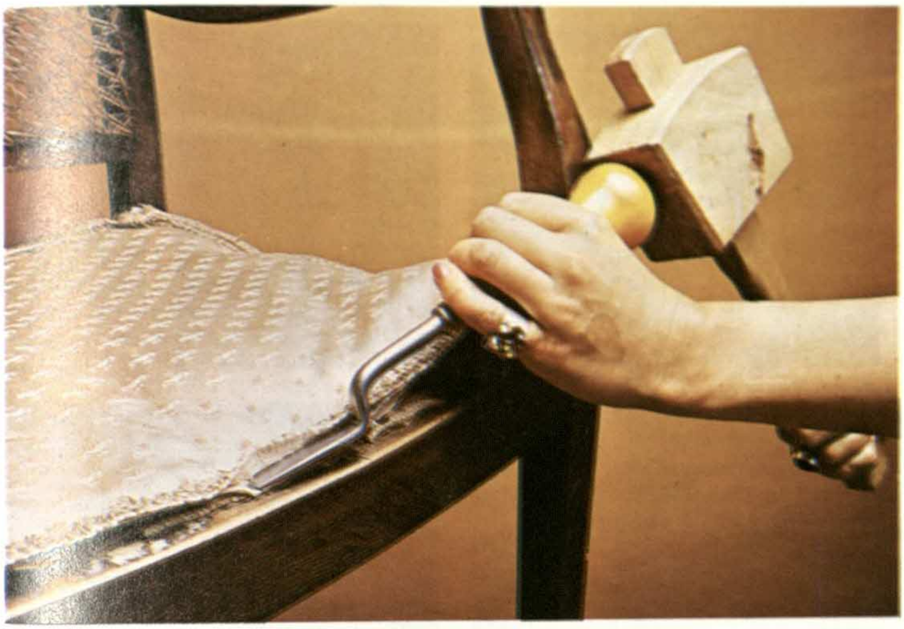
Other kite shapes: X marks bridle position on sticks. Pierce paper to bring bridle to right side.

Padded surfaces with show-wood

Traditionally upholstered chair backs vary in style from light padding on some dining chairs to thicker padding and deep buttoning on larger easy chairs.

Where the upholstery is of a stuff-over style (with padding built up on the frame) the techniques involved are usually very similar to those used for seating (Upholstery chapter 3, page 468). Some different techniques, how-

Steve Bicknell



1. *Driving the ripping chisel along the grain of the wood.*

ever, are used where the upholstery is inset with a border of show-wood around the edge.

These techniques also apply to lightly padded seats—known as pincushion seats—as found on some dining chairs and stools.

Special equipment

To prevent the possibility of damaging the show-wood, use a ripping chisel with a cranked shaft (shown being used in fig.1) for stripping the old upholstery. A cabriole hammer (also shown in fig.1), which has a head of about 6mm (¼") diameter, should be used for applying the new upholstery. For chairs with thick padding you will also need a curved needle for the blind and top stitching, because a straight needle would hit the wood.

Stripping the upholstery

Always take great care when stripping the old upholstery from a chair with show-wood. Work on a surface where there is no danger of the chair slipping off, and lay the chair on its back with a soft pad underneath the areas where the show-wood touches the surface.

☐ Drive the chisel along the grain of the wood, taking care to keep it as flat on the wood as possible. Keep the tip away from the show-wood so if you slip it cannot chip off the wood (fig.1).

☐ Remove all tacks, however difficult this may be, to give enough room for the new tacks. If a tack head breaks off, either pull out the remaining part with pincers or hammer it down.

☐ When all the upholstery has been stripped off, carefully examine the rebate (narrow recessed ledge) to which it was attached. If the chair has been re-upholstered before, you may find that the rebate is in poor condition with so many tack holes that it may be difficult to place the new ones securely. This can be solved by filling the holes with a substance such as Plastic Wood or Brummer stopping.

Light padding

Either horsehair or linters felt (a thick wadding) may be used for light padding. Horsehair is the more traditional material but linters felt is useful on chairs where the outside back fabric is attached to the inside back so that it shows through the frame, or on chairs where the rebate is very narrow or fragile and you wish to use the minimum of tacks.

Applying horsehair. (This method is also used for pincushion seats.)

☐ Attach the new webbing (if used on the original upholstery), with 12mm (½") fine tacks, leaving 6mm (¼") clear between the webbing folds and the edge of the show-wood.

☐ Attach the hessian using 10mm (⅜") improved tacks placed 4cm (1½") apart. To use a minimum of tacks, fold over the bottom edge of the hessian and tack through the double thickness. Keeping the grain straight, pull the hessian taut to the top edge and tack through the single thickness. You can then turn over one side edge and tack this through the double thickness. Tack the opposite edge through the single thickness, then fold over and tack down the fold at intervals. Repeat for the top edge.

☐ Work bridle ties into the hessian and fill the whole area with stuffing about 2.5cm (1") thick (when compressed lightly with your hand) in the middle and tapering to the edges (fig.2).

☐ Lay a piece of upholstery wadding, skin side up, over the stuffing.

☐ Cut a piece of cover fabric to fit, allowing at least 2.5cm (1") all round. Attach the fabric with 1cm (⅜") fine tacks, placing them about 2.5cm (1") apart and 3mm (⅛") inside the show-wood. Pull the fabric taut and tack the edges in the same order as the hessian but through single thickness only all round. Trim off the excess fabric with a handyman's knife so that the raw edges are inside the show-wood.

☐ Glue on braid to cover the tacks and raw edges, placing the outer edge of the braid just inside the show-wood.

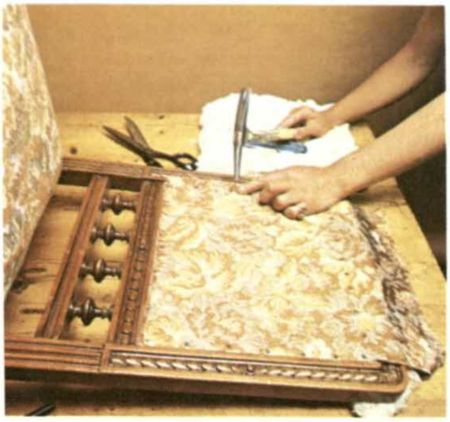
☐ Turn the chair over and attach the outside back panel if there is one.

2. *Tapering horsehair at the edges.*

Pincushion seat, lightly upholstered with a horsehair stuffing.

Paul Kemp

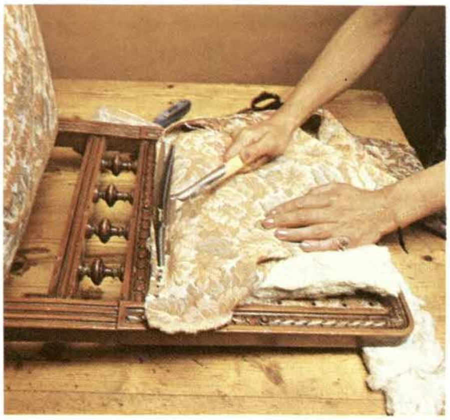
Applying linters felt. Attach the outside back panel, right side facing down, to the inside back if the chair is of this style. Place the tacks 2.5cm (1″) apart and 6mm (¼″) from the show-wood (fig.3).



3. *Attaching outside-back panel.*

☐ Cut a double thickness of linters felt to the size of the area and lay it in position.

☐ Attach the inside back panel as for chairs with horsehair padding (fig.4).



4. *Tacking fabric over linters felt.*

General points

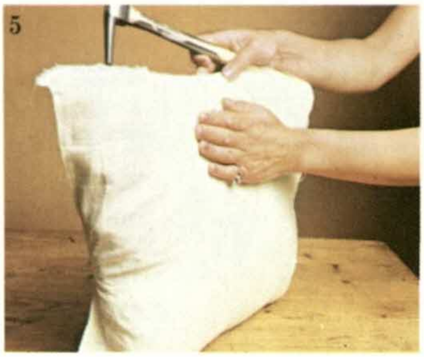
To prevent damaging the show-wood:

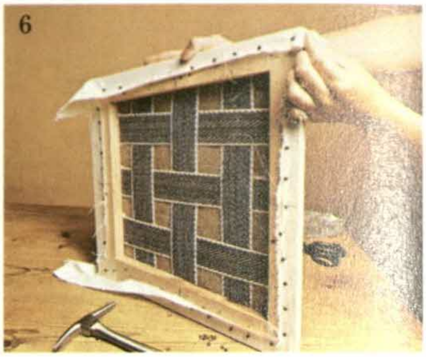
☐ Place a soft pad under any sections of show-wood which touch your work surface.

☐ Place a wood block (or mallet head) under tack rails as extra support while attaching tacks to these surfaces.

☐ Leave a clear margin of 6mm (¼″) between edges of webbing, scrim and hessian and the show-wood so that there is room for the tacks attaching the top cover.

☐ Try to avoid using the web strainer against show-wood. If this is unavoidable, place a soft pad between the show-wood and the strainer.





Paul Kemp

Drop-in dining seats

These are upholstered in a similar way to the pincushion seat (page 2442), the main difference being that a calico cover is used to shape the stuffing and the cover fabrics are taken over the edge of the frame and attached underneath.

If you are replacing a thin cover fabric with a thicker one—like the needlepoint cover shown here—lay the cover over the frame and check that it will fit in the chair before you begin the new upholstery. If necessary plane the sides of the frame until it fits.

When attaching the calico cover, tack the back edge to the underside of the frame first, placing the tacks 2.5cm (1″) apart to within 2.5cm (1″) of the corners.

Turn the frame upright so it is resting on the back edge, smooth the calico over the stuffing and tack the front edge (fig.5).

Tack the side edges in a similar way.

To finish the corners, press the excess on the front or back edges as appropriate and fold down in a neat pleat (fig.6).

Cover the calico with wadding and then attach the top cover as for the calico, cutting away some of the excess fabric at the corners.

Marshall Cavendish

Thick padding

Thickly padded backs can be upholstered in the same method used for seats or, where the surface is deep buttoned, you could use the following easier method.

☐ Attach the webbing and hessian as described for light padding with horsehair.

☐ Decide the depth of the padding and cut a piece of scrim to the size of the area to be padded plus a margin equal to the padding depth plus 2.5cm (1″) all round.

☐ Centre the scrim over the area and temporary-tack it to the rebate.

☐ Mark the buttoning pattern on the scrim and draw a line round the perimeter of the pattern.

☐ Using a curved needle and twine, backstitch the scrim to the hessian firmly along the marked line (fig.7).

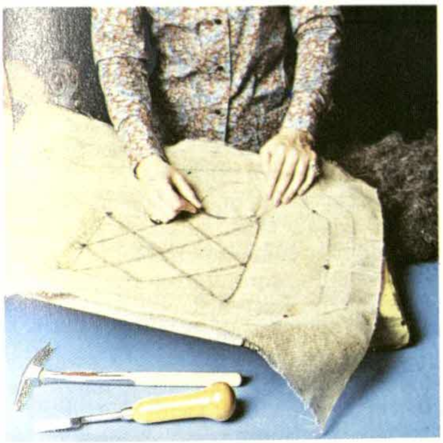
☐ Draw another line on the scrim along the inner edge of the rebate. Draw a third line outside this, leaving a margin equal to the desired padding depth.

☐ Remove the temporary tacks and fold back the edges of the scrim. Work bridle ties into the hessian below.

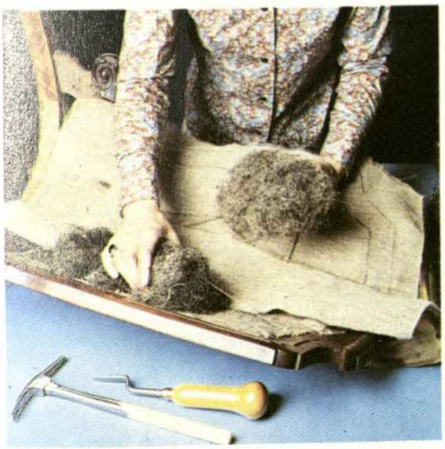
☐ Insert enough stuffing (fig.8) into the bridle ties to form an even roll when the scrim is folded under and tacked to the rebate along the third drawn line (fig.9).

☐ Work blind stitch and top stitch round the roll (figs.10-14).

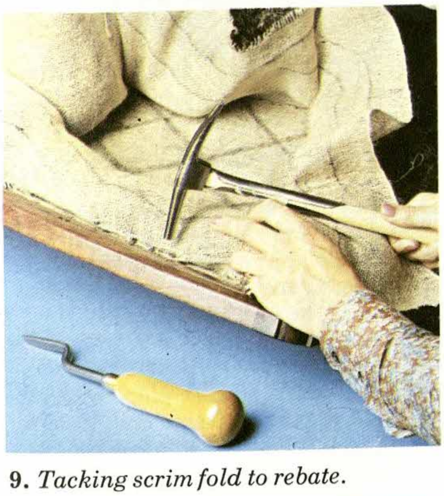
☐ Make twine markers and more bridle ties in the scrim in the middle section of the back. Add the stuffing and continue buttoning (fig.15, see also Upholstery chapter 12, page 1894).



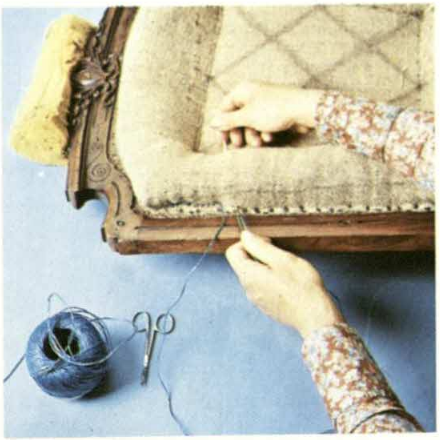
7. *Stitching scrim to hessian.*



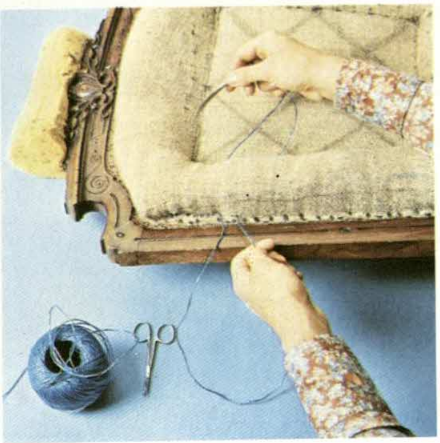
8. *Inserting stuffing along edge.*



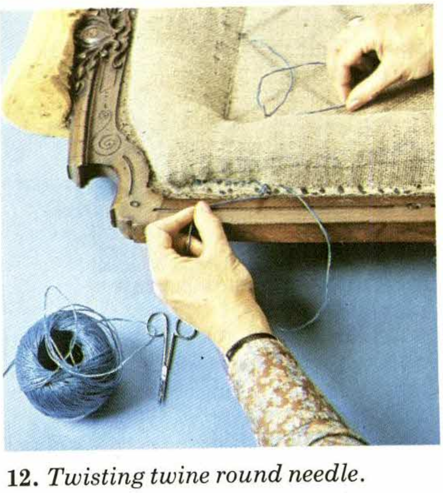
9. *Tacking scrim fold to rebate.*



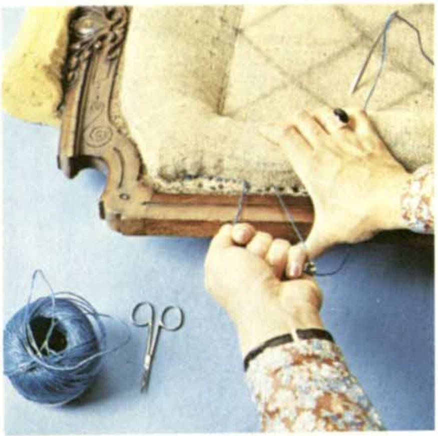
10. *First stage of a blind stitch.*



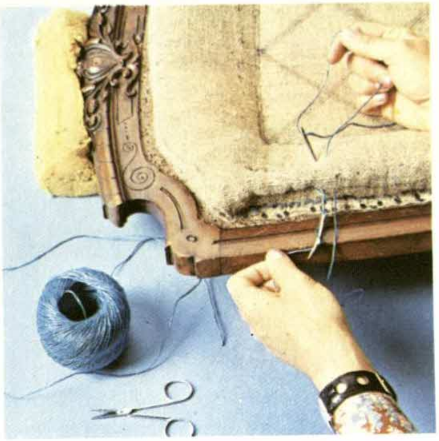
11. *Pulling curved needle through.*



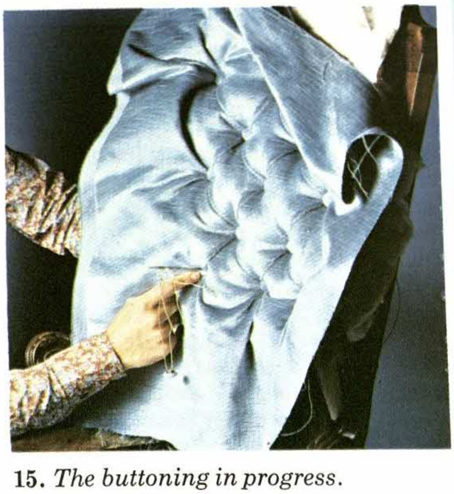
12. *Twisting twine round needle.*



13. *Tightening blind stitch.*



14. *Working top stitch.*



15. *The buttoning in progress.*

Miniature picture frames

Clay 52

Paul Kemp

Favourite pictures receive a personal touch. These miniature frames are quick to make and have a delicate appeal. Flowered frames designed by Patricia de Menezes.

It is very easy to make small ceramic picture frames, either to hang on the wall or to stand on the sideboard. If you do not have access to a kiln, use self-hardening clay, in which case you can use gloss paints to decorate the finished frames. The instructions here are for a round frame and for a square frame with a stand.

Do not use cobalt or copper oxide with self-hardening clay.

The round medium sized frame shown is 11cm (4″) across and the square frame measures 13.5cm x 13.5cm (5″x 5″). You can, of course, make them smaller or larger but, because of the possibility of the clay warping slightly, it is unwise to attempt to make a round frame larger than 17.5cm (7″) from edge to edge, or 15cm (6″) square.

To make both frames

You will need:

About 2kg (1 lb) prepared clay (terracotta, stoneware or self-hardening).
Strip of hardboard to roll clay on.
Wooden rolling pin.
Small knife and small fret saw.
Ruler and scissors.
Round template.
Two square pieces of hardboard, slightly larger than required square frame size.
Kiln, unless using self-hardening clay.
Glazes suitable for clay used.
Gold or silver wrapping paper.
Ribbon, 1cm ($\frac{1}{3}$″) wide, 7.5cm (3″) long for each picture frame.
Ribbon 2.5cm (1″) wide, 10cm (4″) long for each round picture frame.
Old tile to keep frames flat while drying.
Toothpick.
Small piece of hardboard for support.
Small strip of cotton material.
Strong glue (such as Araldite Rapid).
1 teaspoonful copper oxide (optional).
1 teaspoonful cobalt oxide (optional).
Pictures—old greetings cards, photographs, etc.

The round frame

☐ Take about half the clay, which should be a little on the soft side without being tacky.

☐ If you wish, mix 1 teaspoonful of copper oxide with the clay.

☐ Use the strip of hardboard to roll out a long, thin sausage of clay, keeping it as even as possible.

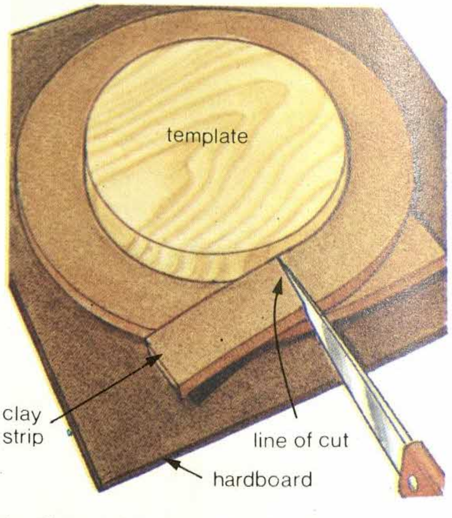
☐ With rolling pin flatten the sausage of clay. The flattened clay should be about 5mm ($\frac{1}{4}$″) thick.

☐ Using the ruler to keep a straight edge, cut off the rough edges, leaving a strip of clay 2.5cm (1″) wide.

☐ Place the round template on a piece of hardboard.

☐ Lay the clay strip around the outside edge of the round shape and overlap the ends.

☐ Cut through the two thicknesses of clay at the join (fig.1).



1. *Cut right through the clay overlap.*

☐ Remove the waste pieces of clay.

☐ Moisten and roughen the join, with the toothpick, and press the two edges gently together.

☐ Smooth the join with the knife.

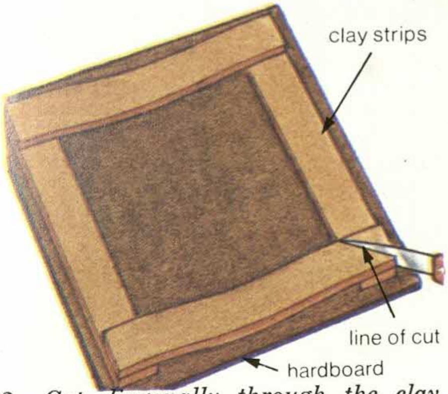
☐ Remove the template from the centre.

☐ Gently lay a second piece of hardboard on top of the frame and, holding the frame between the two boards, turn it over.

☐ Take off the top board and smooth the join with the knife.
☐ Allow the clay to dry completely, preferably under an old tile to prevent warping.
☐ When the frame is dry, carefully scrape any rough edges smooth with a knife.

The square frame

Work on a square shape of hardboard, slightly larger than the required size of the picture frame (to allow for shrinkage during firing).
☐ Take the other half of the clay and, if you wish, add the cobalt oxide and mix it thoroughly with the clay.
☐ Roll out, flatten and trim the clay as before to produce a strip at least 51cm (20") long.
☐ Using the edges of the hardboard as a guide, cut the strip into four lengths to form the sides of the square.
☐ Lay down the two side strips first, parallel to each other and 13.5cm (5") apart.
☐ Lay down the top and bottom strips so that they overlap the side strips at the corners.
☐ Mitre the corners by cutting through the two strips of clay diagonally, from inside corner to outside corner (fig.2).



2. *Cut diagonally through the clay overlap.*

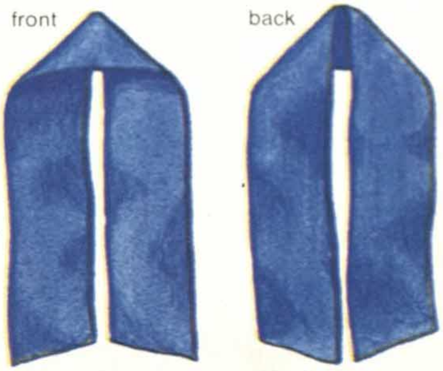
☐ Remove the waste clay and finish off the joins as before. Leave the frame to dry out, preferably under a tile.

Finishing off

When the frames are dry, biscuit fire them. Glaze the frames and re-fire. If using self-hardening clay, use special glazes and do not fire.

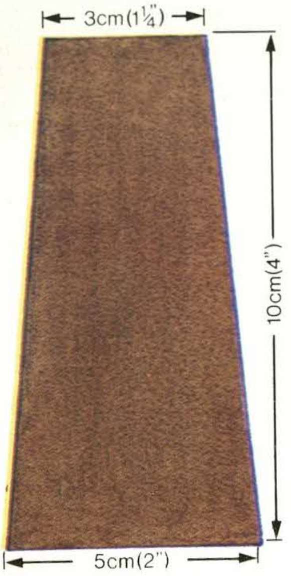
Mounting the pictures

Round frame. Using the frame as a guide, cut the picture to size. Bear in mind that the outer edge of the picture will be covered by the frame.
☐ Cut a piece of stiff card to the same size as the picture, using the picture as a template.
☐ Glue the picture to the back of the frame.
☐ Stick the stiff card to the back of the picture and frame.
☐ For a neat finish, cut a piece of wrapping paper to fit the back of the frame and stick this on to the stiff card.
☐ Cut a piece of ribbon 2.5cm (1") wide by 10cm (4") long.
☐ Fold the ribbon in half widthwise and glue the inside of the fold at each end for about 2.5cm (1").
☐ Fold the ribbon in half lengthwise to form a loop (fig.3).



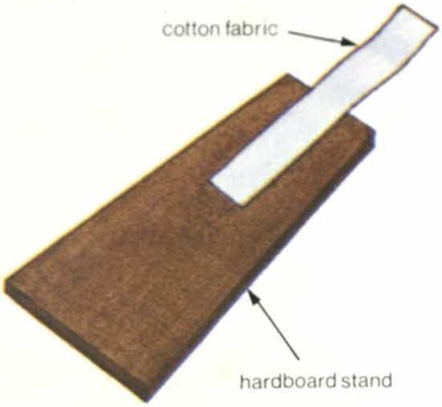
3. *Make a loop of ribbon by folding it in half so that the ends cross.*

☐ Glue the ends of the loop to the back of the picture.
☐ Cut out a circle of wrapping paper and stick this over the raw ends of the ribbon to make a neat finish.
Square frame. Follow the instructions for mounting the picture in the round frame until you have stuck the stiff card on to the back.
☐ To make a stand for the square frame, cut out a piece of hardboard to the dimensions in fig.4.



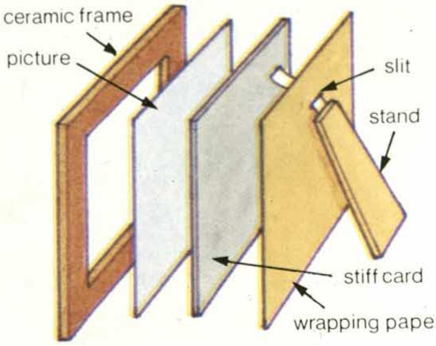
4. *The stand is made from hardboard. Cut it out to the dimensions given above.*

☐ Cut a piece of cotton fabric 9cm (3½") long by 3cm (1¼") wide.
☐ Fold the fabric in half lengthwise.
☐ Use strong glue to stick one half to the top end of the frame stand (fig.5).



5. *Glue the folded fabric in place.*

☐ Allow the glue to dry out completely.
☐ Cover the stand with wrapping paper, folding over the edges neatly, and glue it in place.
☐ Cut out a piece of wrapping paper to cover the back of the picture.
☐ Cut a horizontal slit in this wrapping paper, about 3cm (1¼") from the top, centrally placed, and wide enough to take the remaining half of the cotton strip.
☐ Thread the rest of the strip of cotton fabric through the slit with the right side of the paper facing you.
☐ Glue the cotton strip to the back of the frame (fig.6).



Paul Williams

6. *Glue the strip to the frame back.*

☐ Glue the backing (wrapping) paper on the back of the picture and frame.
☐ Cut a piece of 5mm (¼") wide ribbon, 7.5cm (3") long.
☐ Glue one end of the ribbon to the centre of the back of the frame and the other end to the underside of the stand. This will hold the support at a suitable angle from the back of the picture. The shorter the piece of ribbon, the more upright the picture.
☐ Cover the ends of the ribbon with circles of wrapping paper.
The finished frames can be decorated with ceramic flowers stuck in place with strong glue. These can be made either of clay or of porcelain. Details on how to make porcelain flowers follow in the next chapter.

Whittling and chip carving

Wood — modelling 11

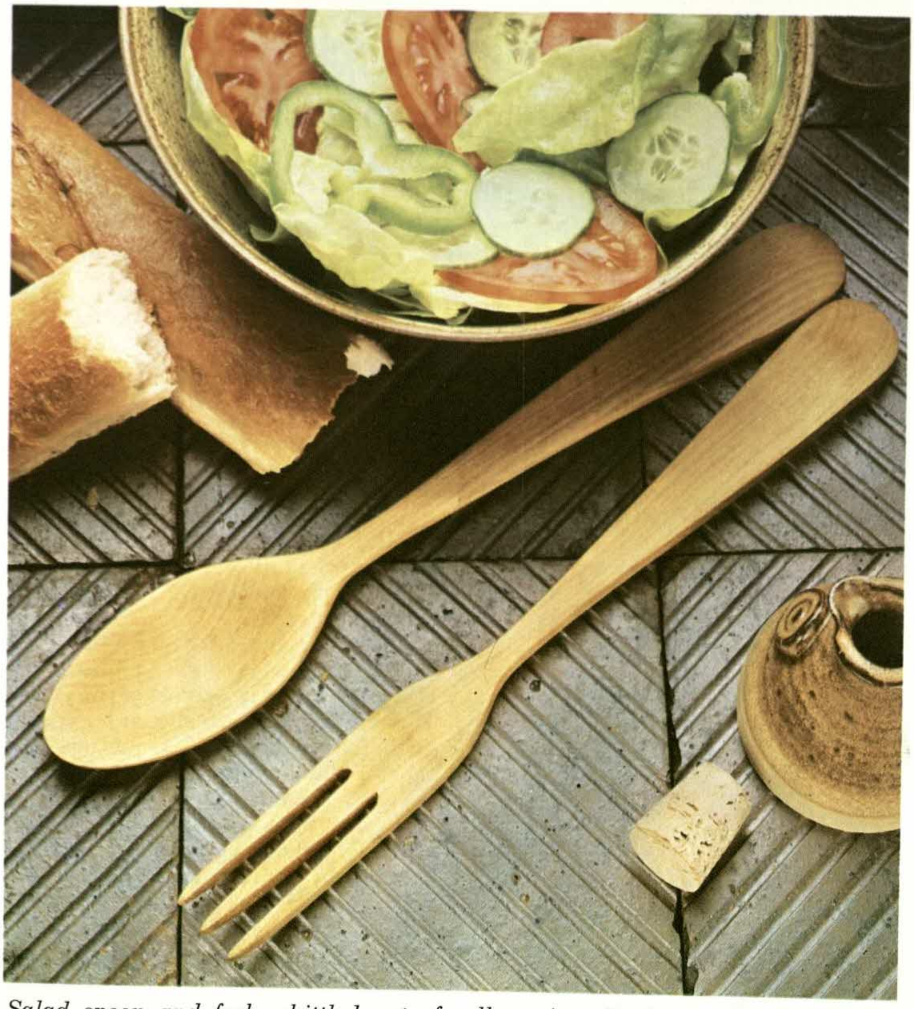
Whittling is the art of carving wood with a knife. Most whittling is done in softwoods but professional whittlers use hardwoods and even ivory. Right through history, sculptors such as the carvers of ancient Japan have used the knife as their principal tool for fine work.

In the past the most usual knife to employ was a penknife or jack-knife. However by the 19th century some craft workers had begun to develop special craft knives, as the author of *Moby Dick*, Herman Melville, points out with regard to American whalers who spent their idle moments whittling whale bone.

Though much good work is done with an ordinary knife, a penknife is not recommended for beginners. Instead you should acquire a set of good craft knives. There are several makes available which include knives, gouges, chisels and routers, all of which fit into one of four types of handle.

Though the blades can be replaced when blunt, it is worth while acquiring an oilstone and learning how to sharpen your own tools. The sharper the blade, the cleaner the cut. Polishing whittled work is optional and many craftsmen leave the cuts showing, giving a textured appearance.

Do not try to whittle everything in a project. Do all the rough work with a coping saw and/or Surform tools.



Paul Kemp

Salad spoon and fork whittled out of yellow pine. Designer: Carson Ritchie.

Woods

The types of wood to use present no problem as almost any will do. The harder the wood, the more precise are patterns and shapes you can whittle. Softwood tends to splinter and crumble, making it difficult to whittle fine details. Begin working with a wood such as pine, bass-wood, red cedar, poplar, California redwood or cypress, all of which are fairly soft. Poplar is hard enough to take a fair amount of detail as is the redwood and cypress which cut cleanly, leaving sharp edges. Harder woods, in which fine details can be cut, include oak, mahogany, teak, beech, sycamore, walnut, chesnut and holly which is a beautiful, hard white wood.

Ebony is a very hard wood and not easily obtained. You may be able to find small pieces suitable for whittling in the form of old desk rulers or old wooden bowls. Boxwood is the aristocrat of hardwoods. Its golden yellow colour was much favoured by the carvers of the Renaissance who fashioned carvings so fine that a single rosary bead might contain a crucifixion scene with dozens of figures, each fully portrayed.

Whittling is supposed to be a poor person's hobby, so do not rush out and buy lots of expensive wood. A good source for wood is a timber yard where you should be able to buy offcuts fairly cheaply. Market places are another source of cheap wood and decrepit old mahogany tables will provide good wood for whittling.

Look out also for ebony-handled hairbrushes and piano keys made from a combination of ebony and ivory. Old billiard balls make nice draughtsmen though this sort of whittling is for those who intend taking the craft further than simple wood carving. Old billiard balls were made from only the best 'scriveloes' or Indian elephant tusks and carving ivory is difficult.

Salad spoon and fork

Begin by whittling something fairly basic such as a spoon and fork—shapes with which you are familiar. The set shown here is made of yellow pine: they are 29.5cm (11½″) long. The bowl of the spoon is 50mm (2″) wide.

You will need:

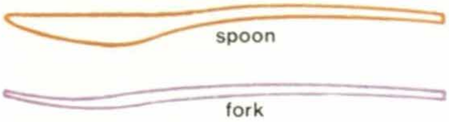
A piece of wood 150mm x 25mm (6″x 1″), 35cm (14″) long.
A coping saw.
Pencil and paper.
Craft knives (see box overleaf).
Medium and fine grade glasspaper.
Almond or olive oil.

Right: a selection of finely whittled ladles carved out of various sizes of wood. The initial work on the large ladles can be done with a coping saw.

Roy L Nilson

☐ Trace the patterns given (fig.1) and transfer them on to the piece of wood. Alternatively, you can draw around the outline of a set you wish to duplicate. Mark in both the side and top profiles.

☐ Draw the bowl of the spoon inside the outline of the wide end of the spoon.



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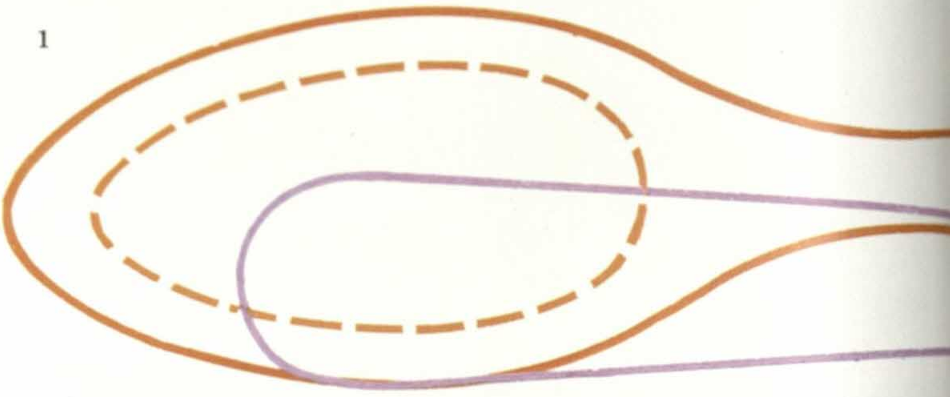
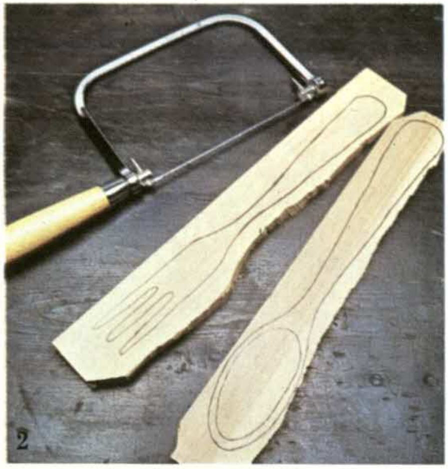
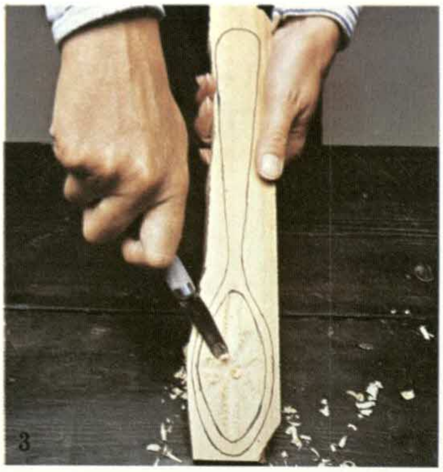




2

☐ With the coping saw cut the wood into an oblong slightly larger than the spoon. Do the same with the fork (fig.2).

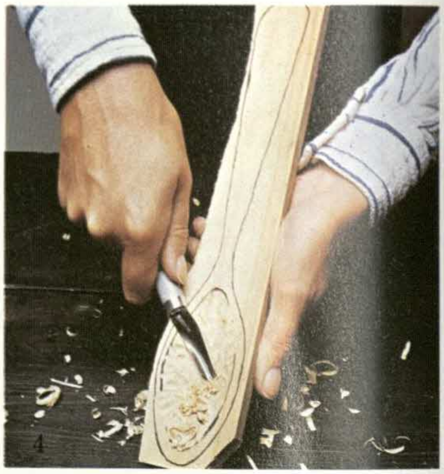
☐ With a gouge, cut a straight groove into the hollow of the bowl, across its length. Cut another groove at right angles so that you are left with a cross.



3

Turn the cross into a star by gouging out the corners (fig.3).

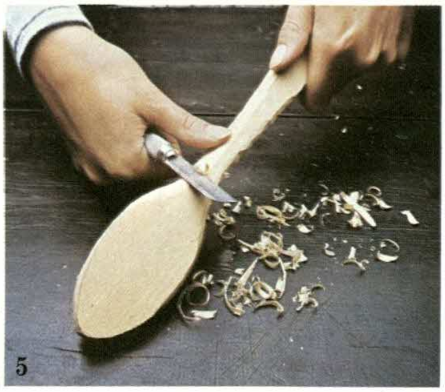
☐ Now gouge out the bits that are left and work carefully around the inside of the bowl with a router (fig.4). Be careful not to lift the grain and split the inside of the bowl.



4

Note: you must cut the bowl before you shape the spoon, otherwise you may not be able to position it correctly afterwards.

☐ Once the bowl is as near perfect as possible, saw around the top profile of the spoon. Re-draw the side profile.



5

Paul Kemp

6

☐ Now start the whittling stage. Wherever possible work with the grain, never trying to take off too large a slice at once (fig.5).

The art of whittling lies in the skill with which you remove fine shavings.

☐ When the spoon is close to the shape you set out to achieve, sand it down using medium grade glasspaper.

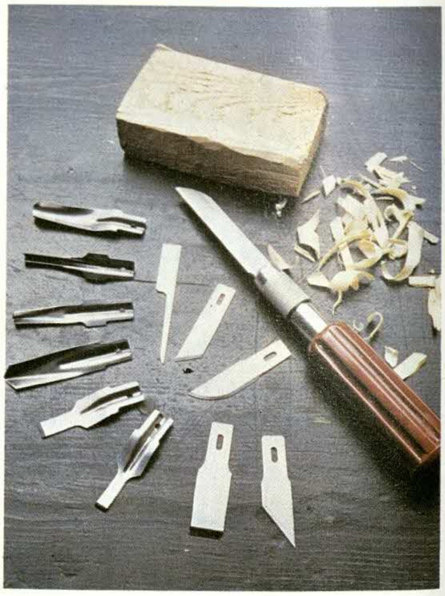
Decorative patterns can now be carved on the handle—this is optional.

☐ Finally smooth the spoon with fine grade glasspaper. Wet the wood to bring up the grain and sand once more with the fine glasspaper.

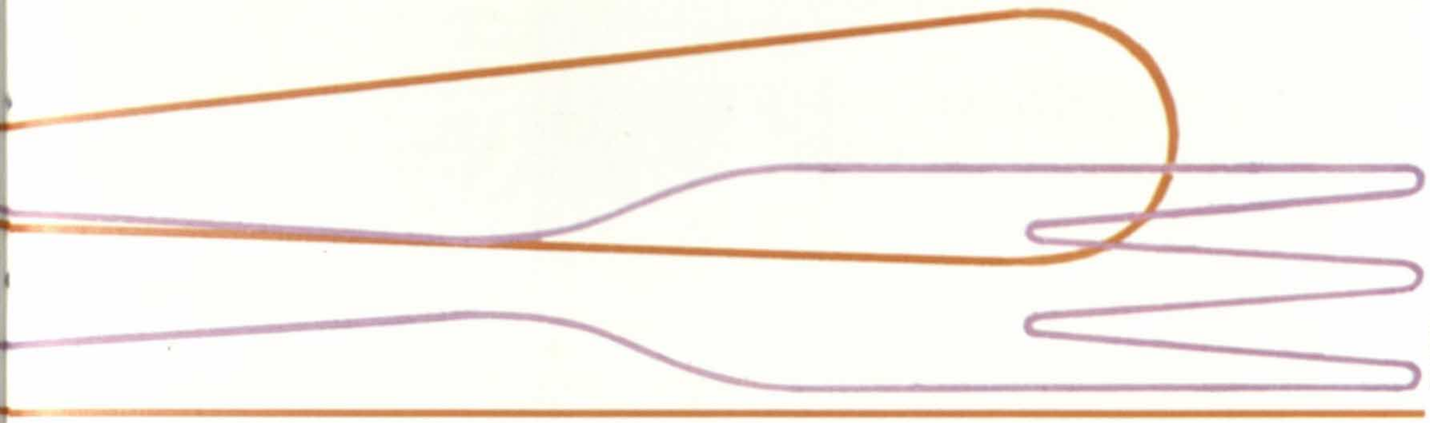
The same procedures are followed for the fork.

☐ To finish the set, rub some almond or olive oil into the grain (fig.6). Do this two or three times.

Once you have mastered the craft, you can embark on something less utilitarian such as a set of chess pieces or some small animals.



An Exacto carving knife set showing different types of blade and gouge which can be fitted into the handle. The set is ideal for whittling work.



Paul Williams

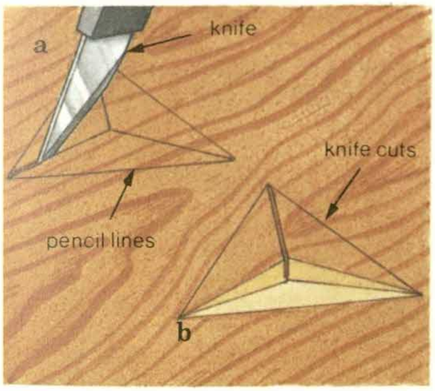
Chip carving

Chip carving is the art of ornamenting a wood surface by cutting shallow patterns, usually of small diamonds, triangles or crescent shapes. Because the tools used are the same as those in whittling, it can be considered an extension of whittling. This is not always the case however, as many items decorated with chip carvings are not whittled.

As chip carving is very shallow, some chip carvers enhance their patterns by first painting the surface of the wood with a wood stain and leaving the cut-out portions showing white.

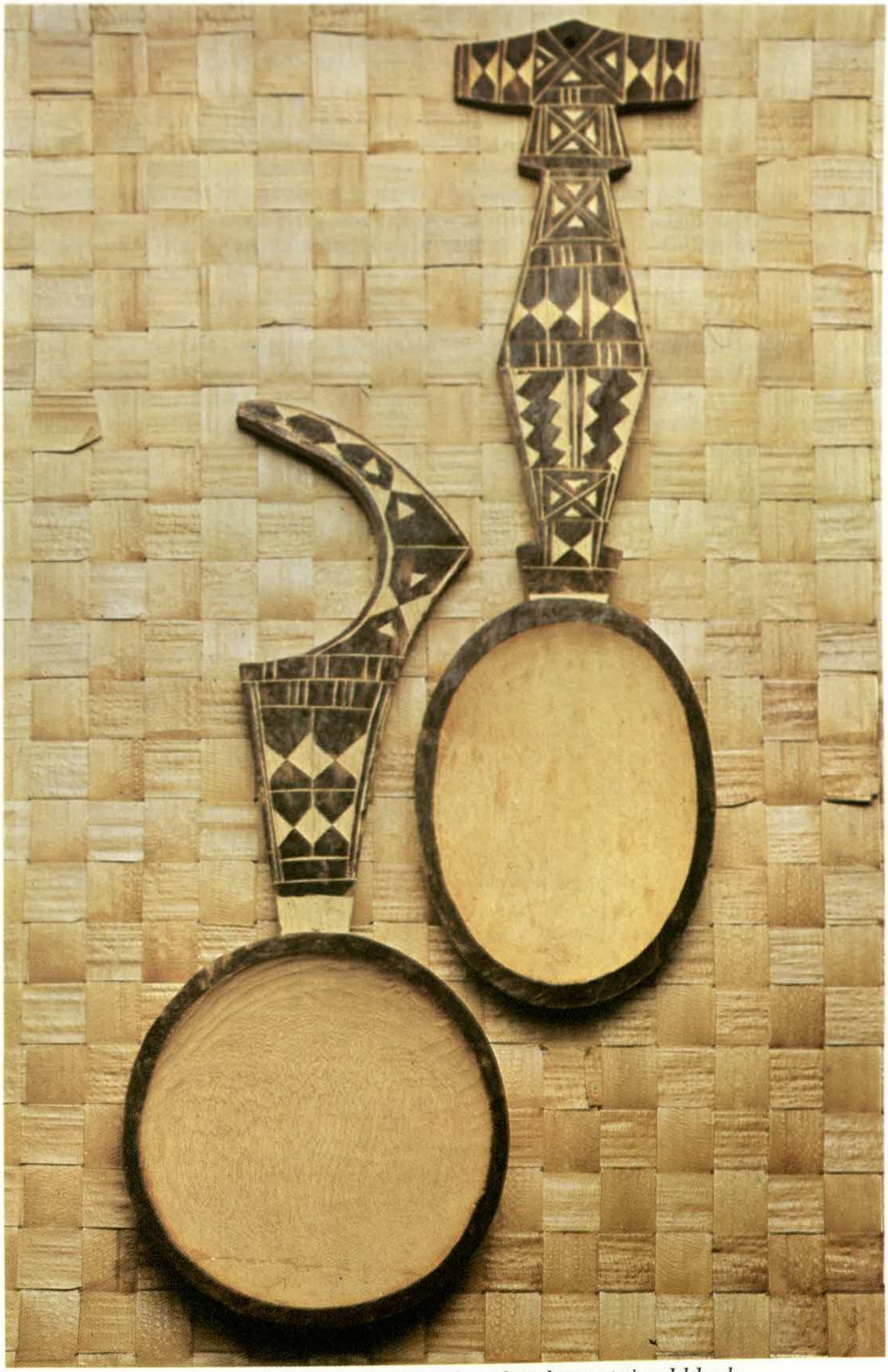
The essence of good chip carving is neatness. All the shapes in the design must be measured, laid out in the exact position and drawn in with a sharp pencil. After that it is an easy matter to cut them out.

To cut a triangle, the basic chip carving shape, cut a 'Y' as illustrated (fig.7a). Work inwards so that the blade cuts deepest where the lines of the 'Y' meet. Join the lines to form a triangle. Excavate each third of the triangle by neatly splitting out the wood in a sloping cut which reaches its deepest point in the centre of the triangle (fig.7b).



7a, b. *Cut a 'Y' inside the triangle and remove each section separately.*

The other patterns shown here are based on a similar technique. Crescents can be made with a U-shaped gouge.



Paul Kemp

African chip carving cut into wood which has first been stained black.

Soap making at home

Home herbalist 8

Long before soap was discovered the Egyptians had a fetish for bathing. They would wash before and after meals. Before washing they were rubbed down with sand to clean their pores; after the bath they were rubbed with perfumed oils.

Legend has it that soap was discovered by accident in Rome about 1000 BC. People used to sacrifice animals to the gods by burning them on altars on the summit of a hill. The fat of the animals accumulated on these altars and would mix with the ashes of the fire. Rain would wash the mixture down the hill to the banks of the Tiber where the local women would wash their clothes. They discovered that by rubbing the clothes into this mixture they became cleaner faster and with less effort. The village where this happened was called Sapo—hence the name soap.

Years later soap was being made commercially. In the ruins of Pompeii a soapmaker's shop and a quantity of soap were found.

In Spain, in the district today known as Castile, cosmetics and soap were being made from olive oil by 600 AD. Soap making had also become an important industry in Italy and eventually Savona and Venice became important soap making centres.

With the advent of the Dark Ages the processing of soap came to an end. A clean body and clothes were thought to imply that the soul was unclean. Plague swept through the cities, clergymen and the nobility would carry rags soaked in vinegar to prevent the foul odours reaching their nostrils. In England a revival in bathing came when Henry IV founded the Order of the Bath in 1399—however, it only meant that each knight had to take one bath in his lifetime! Later Oliver Cromwell, who was very opposed to the use of soap, imposed a tax on it which was not finally removed until Gladstone was prime minister in the 19th century.

Louis Pasteur the French scientist was one of the first in the 19th century to make public the relationship of disease to uncleanliness. Consequently cleanliness came back into fashion and soap began to be made on a vast commercial scale. Before soap was readily available it was very much a luxury item. Each household of any standing would make its own soap; the poor would seldom see it or afford to make it.

Fortunately today soap is no longer a luxury item but it is still possible and very rewarding to make your own soap. Not only are you saving yourself money by making a daily necessity, but at the same time you can decide exactly what should go into your soap. The ingredients can vary. Different oils, honey, fruit, vegetables and herbs when added to your soap enrich and scent it.

Soap in its simplest form is a combination of fat and alkali. The fat is normally tallow (animal fat) and the alkali is caustic soda.

Make your soap in original shapes using 'take-away' food containers.

Geoffrey Frosh

Food colouring can be used to add colour to soap.

Tallow and caustic soda combine to form the soap.

The most important factor in successful soap making is that the tallow and caustic soda should be combined in exactly the correct proportions. It is the alkali in the soap which combines with the grease and dirt and is the cleaning agent. Use too much alkali and you will burn whatever you are washing!

Soap making can be extremely messy, so protect your work surfaces with plenty of newspaper.

Rendering tallow

The day before soap making the tallow must be rendered. Sufficient should be rendered to complete the batch of soap. The tallow should be creamy white before rendering. Any blood-stained or discoloured pieces must be removed in order to make pure white soap.

Basic toilet soap

This recipe will make a large bar of toilet soap. Protect all the surfaces in your kitchen with newspaper before beginning.

You will need:

A wooden spoon.
A hand egg-whisk or electric mixer.
A heavy saucepan.
Rubber gloves.
2 mixing bowls.
½ cup of cold soft water.
2 heaped tablespoons of caustic soda.
1 cup of melted tallow.
A plastic pot or small box lined with polythene for a soap mould (plastic 'take-away' food containers are ideal).

☐ Cut the tallow into small chunks and melt in a heavy saucepan over a low heat, stirring occasionally.

☐ Once most of the fat seems to have melted, strain it through a fine mesh sieve or several thicknesses of cheesecloth into a bowl. When cold, refrigerate it. It will keep for several weeks.

☐ When starting to make the soap, have ready a cup of hot melted tallow. Before measuring the caustic soda, carefully read the manufacturer's label and make sure you follow the instructions carefully.

☐ Pour ½ cup of cold soft water into a mixing bowl. Add 2 heaped tablespoons of caustic soda.

☐ Keep the mixture in motion using a wooden spoon. The caustic soda will dissolve in the water and the solution will become very hot.

☐ Allow both the tallow and the caustic soda solution to cool. When they both feel lukewarm (test by placing a hand on the underside of the container) they are ready to mix.

☐ Pour the fat in a continuous stream into the caustic soda and water. Stir slowly (too rapid stirring may make the solution separate).

☐ Beat the mixture slowly using a hand egg-whisk or electric mixer.

To start with, the mixture will be shiny and fluid but it will suddenly turn opaque and thick.

☐ Quickly pour it into the prepared mould.

☐ Should the mixture be overbeaten and congeal, becoming too thick to pour, place the bowl in a saucepan of very hot water and stir the soap until it reaches a pouring consistency.

☐ Allow the soap to set overnight, then turn it out of its mould.

☐ Place the soap to dry where air can reach it, but avoid draughts and cold. Soap should be left at least two weeks to mature before use.

Variations

Using the same basic method many varieties of toilet soap can be created. For the following soaps the solution of two heaped tablespoons of caustic soda and half a cup of cold soft water does not vary. Neither does the method of making the soap.

Herbal soap. To the caustic soda solution add a cup containing one tablespoon of olive oil and one tablespoon of peanut oil; use melted tallow to top up the cup. Finally add two or three drops of the essential herbal oil of your choice.

Honey soap. When honey is added to soap it gives it a delicate golden hue. To the caustic soda solution add a cup containing one tablespoon of olive oil, one tablespoon safflower oil and one tablespoon of honey. Top up the cup with melted tallow.

Cucumber soap. Two or three drops of green cake colouring can be added to this to give a fresh green colour to the soap. To the caustic soda solution add a cup containing one tablespoon of olive oil, one tablespoon of safflower oil and one dessertspoon of cucumber pulp. Top up the cup with melted tallow.

Scenting soap

If you have a sensitive skin any form of perfumed or scented soap should be avoided, especially on the face.

Soap can be scented by adding essential oils. These oils are distilled from herbs, flowers and fruit and are very concentrated so that only two or three drops are necessary to give soap the desired scent.

It is sometimes difficult to buy the essential oils in small quantities and they are expensive. An alternative is to scent the soap with a few drops of your favourite perfume.

The scent should be added once the fat and caustic soda have been combined.

Warning

Caustic soda is more dangerous in its inert dry form than after it is mixed with water. A speck on the hand will mix with perspiration and cause a deep and painful burn. If you should get caustic soda on your skin, run cold water over the spot and rinse it with vinegar or lemon juice. Breathing caustic soda fumes can damage your lungs.

Trapunto and Italian quilting

Cloth — quilting 5

Previous quilting chapters have dealt with ways of working 'wadded' quilting, usually called English or American quilting. This chapter deals with two different types of quilting—stuffed quilting or trapunto and corded or Italian quilting. Both methods are rather slow and require a degree of skill, but the unusual three-dimensional effects that can be obtained justify the time and effort involved.

Trapunto

Stuffed quilting uses only two layers of fabric on to which the design is stitched. Then soft padding is inserted into the back of the work, throwing the shapes into relief. The texture of work can be varied somewhat by using more or less padding.

The earliest known example of trapunto is Sicilian and was made in the 14th century. It was particularly popular during the 17th and 18th centuries, when it was used to decorate the hems of petticoats, or jackets, waistcoats and caps—giving them some weight without making them too bulky.

Some of the work was also beautifully embroidered and often combined other techniques such as Italian quilting. The beautiful materials used, such as silks, satins and linens, suggest that quilting was a style largely reserved for the rich who had the time to work it, or the money to have it worked.

Some of the patterns found on this type of quilting are similar to those shown here. Designs such as flowers and curved shapes lend themselves best to the technique, as corners and angles are difficult to work perfectly.

Fabrics

Natural fabrics such as linen, cotton and silk are best for the top fabric. Butter muslin or a similar loosely woven fabric is needed for the backing so that the padding can easily be inserted. Remember that most stuffed quilting, unless used for cushions, should be lined so you will need additional fabric for the lining.

Padding can be soft unspun quilting wool, cotton wool or soft, synthetic wadding. Synthetic wadding should be removed from between the two layers of open weave mesh in which it is encased. It is important to choose the correct padding as garments or covers to be washed frequently should not be stuffed with wool or cotton wool which may shrink—in this case synthetic wadding is most suitable.

Marking the design

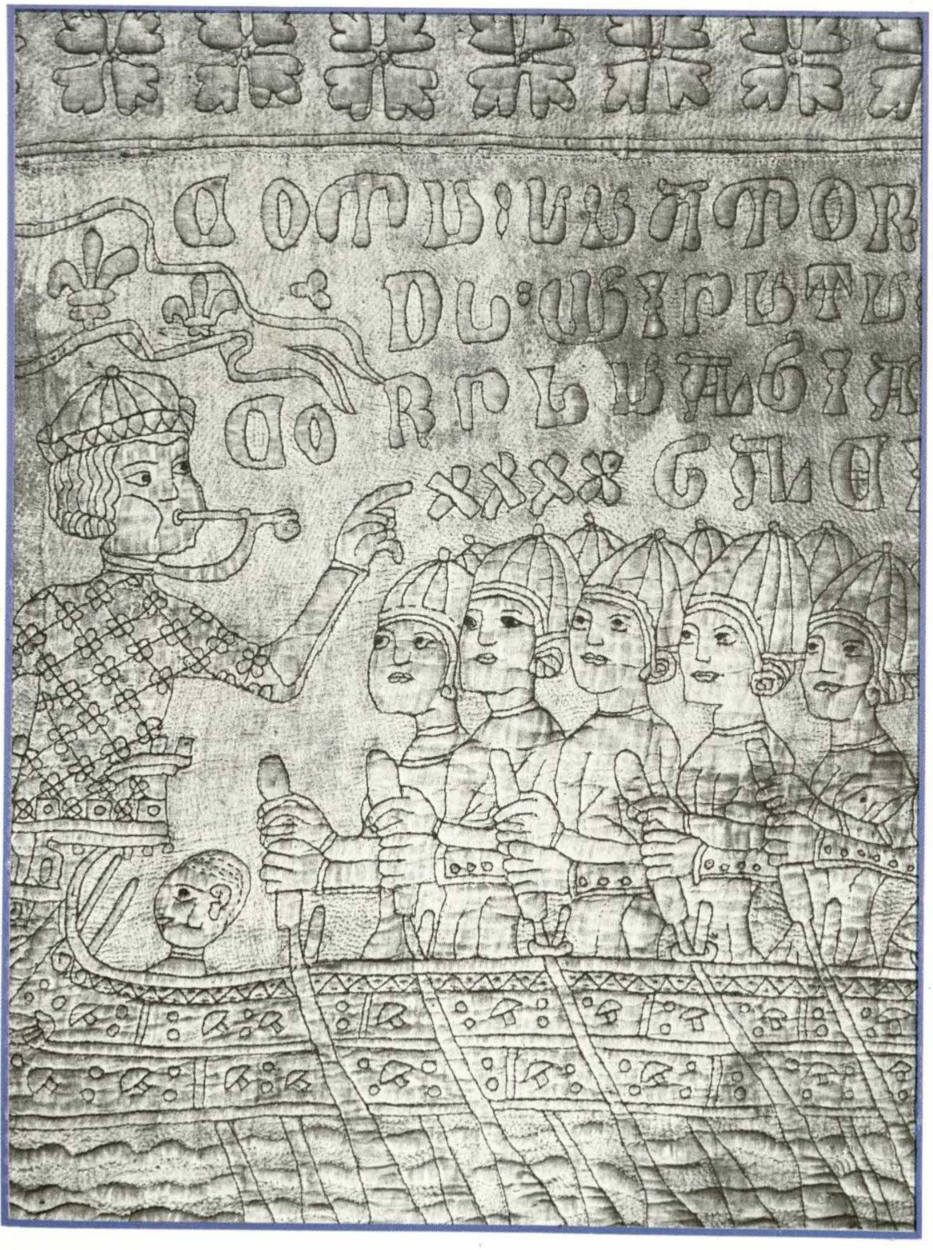
The design is transferred on to the backing or top fabric with pencil or a transfer. Dressmaker's carbon paper is also a good method, but choose a colour which will not show when the work is finished, if the design is to be transferred on to the top fabric.

Stitches

Running stitch and back stitch are the most common of the hand worked stitches. If the design is to be worked from the front use a back stitch; if the design is to be worked from the back use a small running stitch. Larger areas can be successfully worked with straight machine stitch. Stuffed quilting is easiest worked in a frame which will keep the two fabrics taut. An ordinary embroidery frame is quite suitable for small items but for more ambitious projects such as bedspreads, a quilting frame is best (see Quilting chapter 3, page 939).

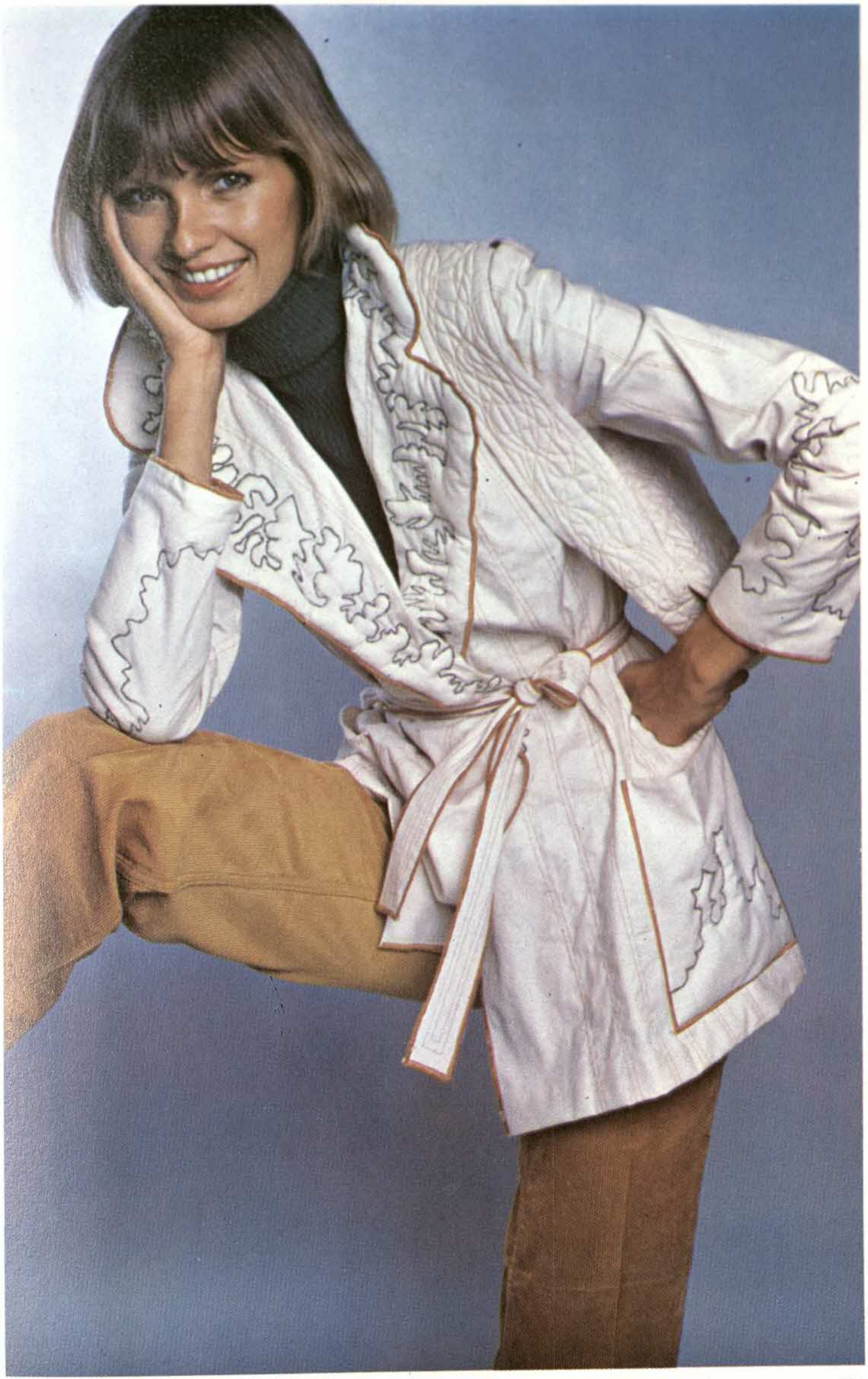
Stuffing

Individual parts of the design are then stuffed from the back of the work. The threads of the bottom fabric are



Victoria and Albert Museum, Crown Copyright

Detail of 14th century Sicilian stuffed quilt portraying story of Tristram.



Transworld

Trapunto motifs on sleeves, pockets and revers transform a simple jacket.

parted and the stuffing is pushed in gently with a blunt tapestry needle or similar instrument.

Enough stuffing should be inserted to pad the space between the lines of stitching so that the pattern is raised on the right side of the work. Care must be taken not to overstuff the work, however, as this will stretch the fabric and distort the design.

The threads of the backing fabric should then be worked back to their original positions. It is advisable to draw the threads together gently with a few stitches to ensure that the stuffing does not seep through.

An alternative method is to cut a slit in the backing fabric through which to insert the stuffing. The slit is then closed with overcasting stitches. This method results in a less tidy finish on the back but, as the finished article should be lined, this is of little importance.

Variations on trapunto

Although trapunto is traditionally worked using two layers of fabric, it is possible to create the same stuffed effect using only one layer. Stuffing can be held in place by applying a patch to the wrong side of the fabric.

An appliqué design, worked on the right side of the fabric, can be given a three-dimensional finish by inserting stuffing under the appliqué shape before tacking and stitching it in place.

Italian quilting

Italian or corded quilting traditionally uses two layers of fabric, sewn together in parallel lines to create an overall linear pattern. Cording is then inserted between the two layers and between the parallel stitching lines to produce a raised effect.

Corded quilting, like trapunto, was especially popular in the 17th and 18th centuries. It was particularly well suited to fitted articles of clothing such as waistcoats, for which wadded quilting would have been too thick. Corded quilting gives a degree of warmth and stiffening as well as an attractive sculptural quality without being too heavy.

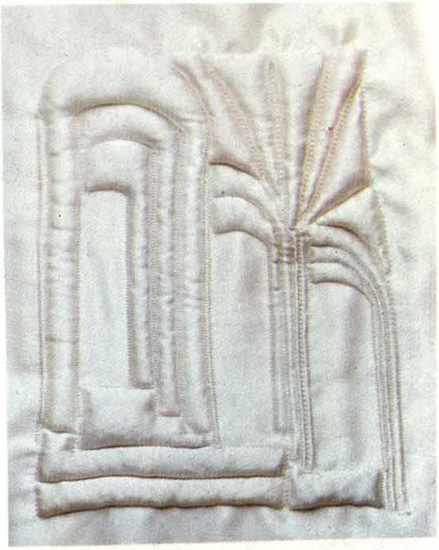
Fabrics

Fabric requirements are the same as for trapunto—natural fabrics with 'give' for the top, and a very loosely woven backing fabric. Again, corded quilting should be lined.

Cord should be cotton, and it should be pre-shrunk to prevent disastrous shrinking later.

Method

The pattern should be marked as for trapunto, but always on the top fabric. Corded quilting designs are usually of natural shapes such as feathers, flowers and shells. Pattern outlines are always marked in two parallel lines. It is important to establish the correct spacing between these lines at the initial planning stage, bearing in mind the width of the cord to be used. If too thick a cord is used for the space



Paul Kemp

Trapunto design, using different coloured stuffing, by Kathleen Smith.

Transworld

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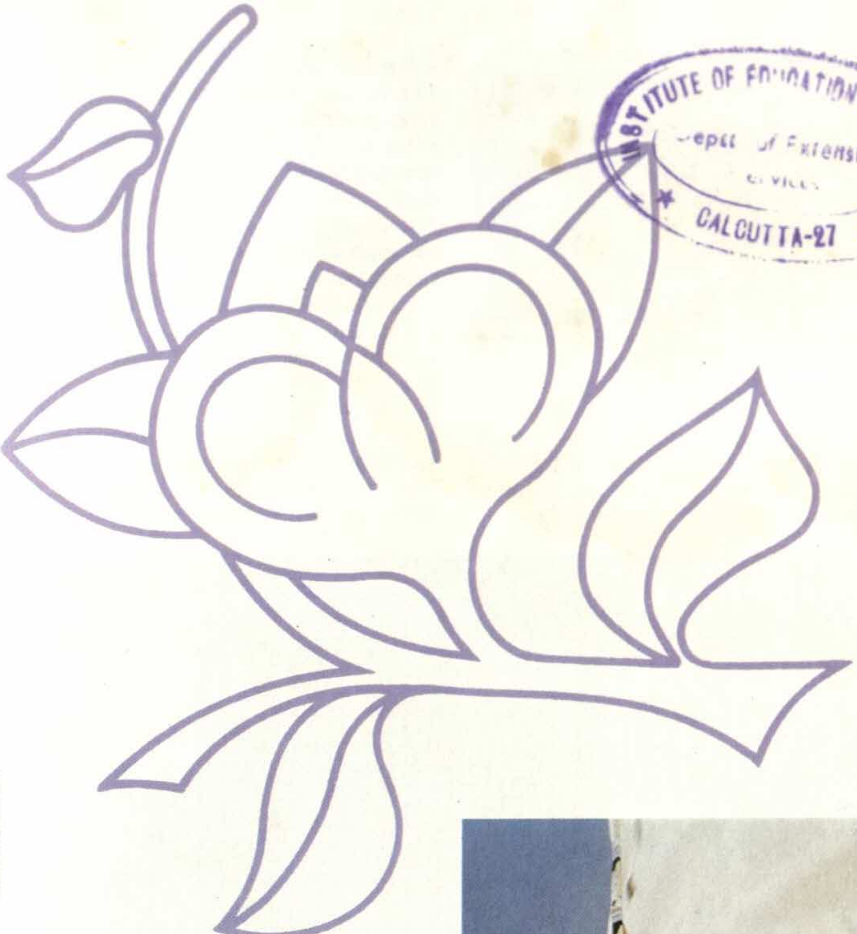


Trace pattern for trapunto motif used on shoulder purse, illustrated below.

Trevor Lawrence

between the stitching lines, the work will pucker. If, on the other hand, the space is too wide for the cord, the pattern will not be raised sufficiently. The two fabrics should then be stitched together using a frame, as for stuffed quilting. Working on the top fabric, follow the pattern lines in back stitch. It is also possible to stitch the two fabrics together using a straight machine stitch. Perfect parallel lines can be obtained using a machine with double needles.

Working from the back, the pattern is then padded by threading the cord between the lines of stitching and between the two layers of fabric. The threads of the backing fabric are parted and the cording is inserted using a bodkin.

The needle should be pushed through for about 2.5cm (1″) before emerging again to pull the cord through. The needle is then re-introduced into the exit hole, leaving a small loop at the exit point. Loops will flatten out gradually and prevent the work from puckering.

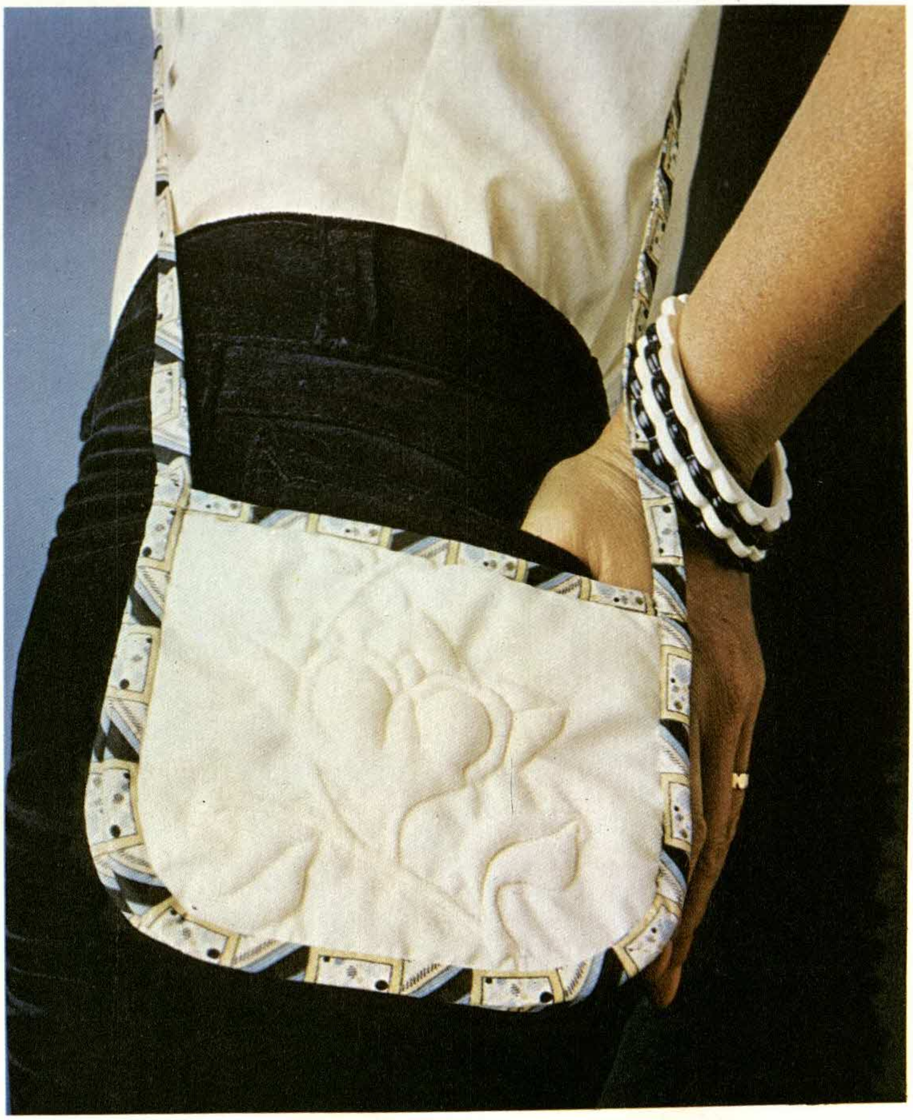
It is a good idea when planning the design to bear in mind entry and exit points and then to cut lengths of cord to correspond to the design. Long pieces of cord can be left uncut for straight lines, but for curved lines it is best to use several short lengths of cord at a time. Cord must always be cut with consideration for the appearance of the right side. It is also necessary to cut cord at intersections in the design, to avoid a double layer of cord.

If the work tends to pucker, it may be because too long a piece of cord has been threaded on to the needle or because it has been pulled too tightly.

Combinations

It is possible to combine trapunto and Italian quilting in the same piece of work. In certain designs it is even advisable to do so. For example, in designs in which flowers or leaves have been stuffed, it is often a good idea to use cord for the narrower lines such as the stems.

Trapunto design incorporated into purse, designed by Eleanor Harvey.



Paul Kemp

Left: the use of pale fabric shows the sculptural effect of corded quilting to best advantage in this elegant coat.

How to make bead dolls

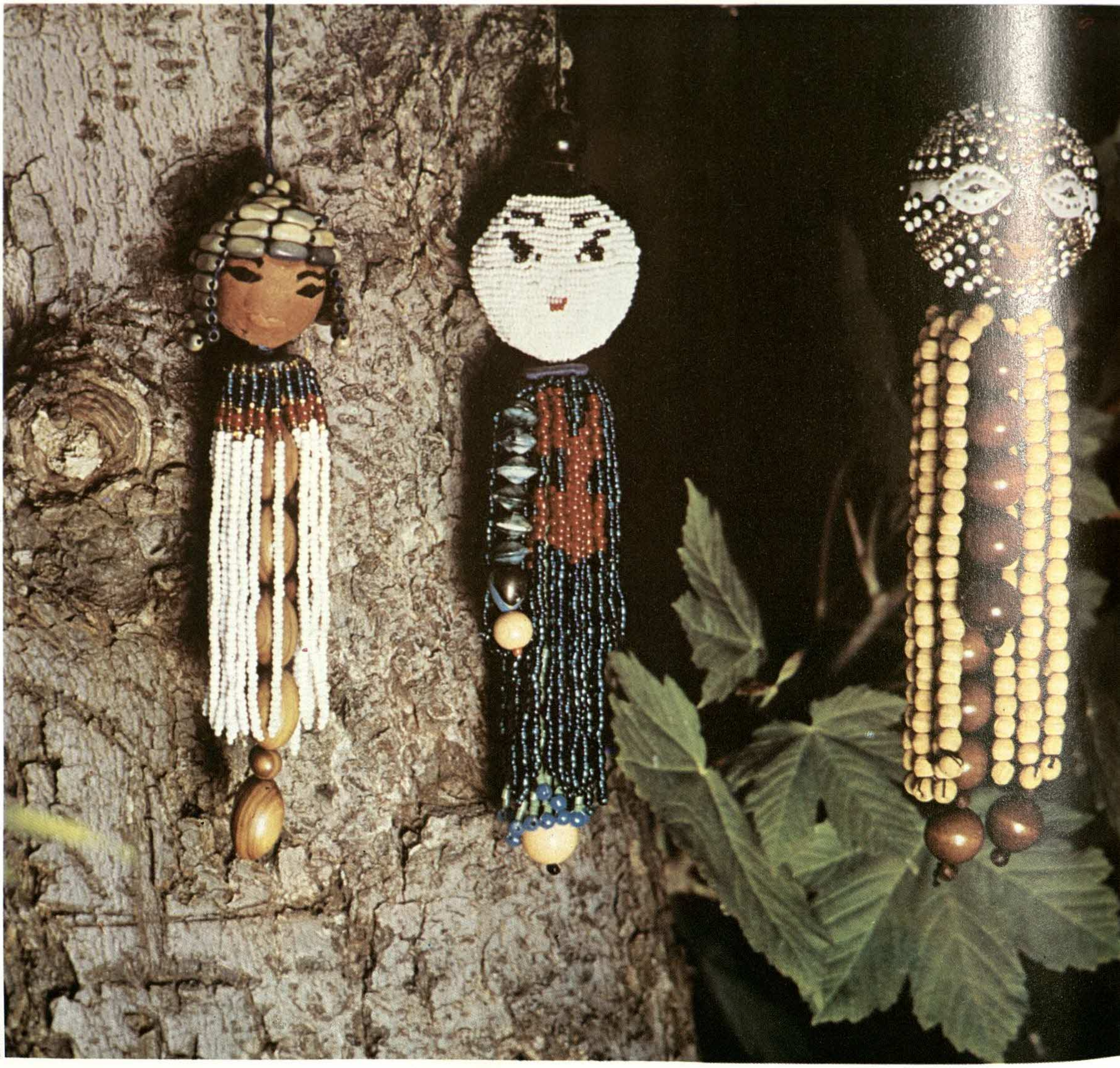
Beadwork 11

Bead dolls are very easy to make, and many different characters can be created depending on your imagination and the variety of beads available. The examples shown here have a bizarre, mysterious character reminiscent of voodoo figures. The basic construction is the same for each character; the difference is in the colour and type of beads used and the features given.

The head

The head can be made from a polystyrene, Styrofoam or cotton waste ball. First of all a hole is made through the centre of the head—this can be done with a hot pin through polystyrene, or a metal knitting needle through Styrofoam and cotton waste. A piece of string or wool is then passed through the hole and a knot made at each end. One end of this piece of string is used to hang the doll up and the body is attached to the other end. The head can be covered with suede or felt, which is glued on, or painted a suitable colour.

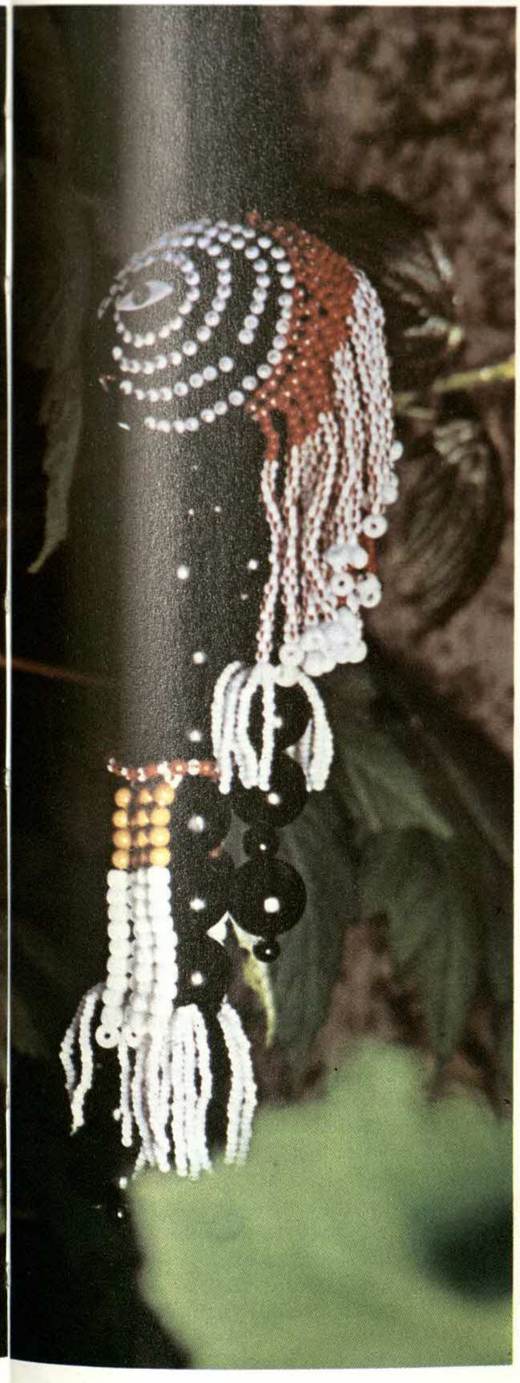
The features can be made in several different ways. On the Chinese doll



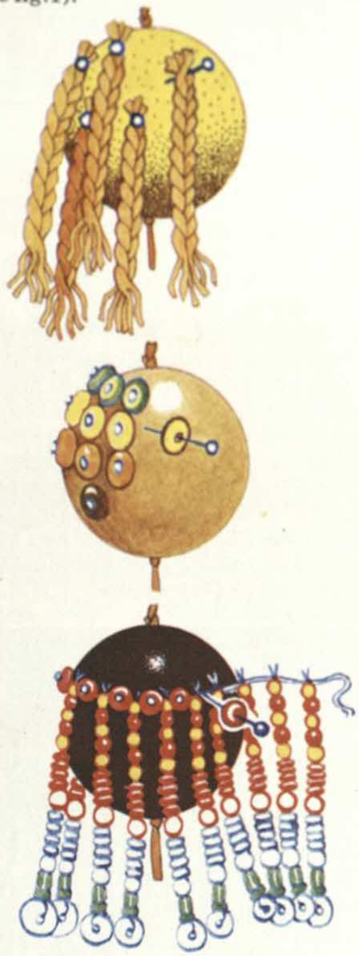
Steve Bicknell

(second on the left in the photograph), the head is completely covered with threaded beads wrapped round a Styrofoam ball in a spiral and glued in place. To do this, the beads must be threaded so that the features and hair fall in the right place. Alternatively, the features can be painted on or made from beads attached to the head with pins. If the holes in the beads are too large to be held in place by a pin, a sequin between the pin head and bead will solve this problem.

Many dolls can be created using different beads and lots of imagination. Here are four possible variations designed by Jeanette Durant.



The hair can be made of plaited wool, pins and beads or strings of threaded beads (fig.1). The long strings of threaded beads should be tied to a double length of string or wool which is then attached to the head with pins (see fig.1).



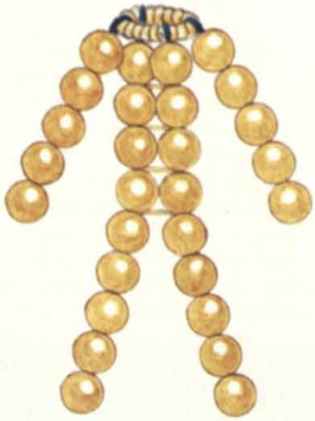
1. *The 'hair' can be made from large beads, plaited wool or strings of beads attached to the head.*

The body

The body is attached to a small curtain ring—about 1.3cm ($\frac{1}{2}''$) inside diameter—which is then attached to the head. The beads should be threaded on to strong thread.

The curtain ring is first bound with wool to match the colour of the head, then the body is attached to it. If the body is to be clothed, the clothes can be made out of a long 'curtain' of beads attached all round the ring as on the three dolls on the left in the photograph. This is done by threading lots of strings of beads all the same length and tying them on to the ring. Patterns can be created by threading different coloured beads.

Detail of the head of one doll.

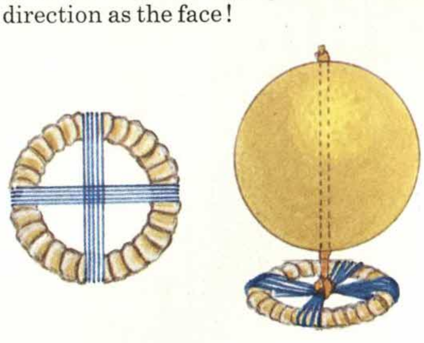


2. *The body, arms and legs attached to the curtain ring.*

To make arms, legs and a torso, thread two long strings and two shorter strings and attach them to the ring. Then tie the upper half of the two longer strings together to form the torso (fig.2). If you wish to make the arms and legs bend, thread them on to fuse wire instead of thread.

On the doll on the right in the photograph further embellishments have been added. This is done by stringing beads, attaching them to a piece of thread and then tying round the 'ankles', 'wrists' and 'waist'. You could make up your own costume for a doll using the same technique.

When the body is finished it is attached to the piece of string which was threaded through the head. So that the body will hang straight, make a criss-cross of threads on the curtain ring and attach the head to the centre of the criss-cross (fig.3). Be sure to get the front of the doll facing in the same direction as the face!



3. *Attach curtain ring to the head.*

Coral Mula

Outdoor mosaic decoration

Mosaic 5

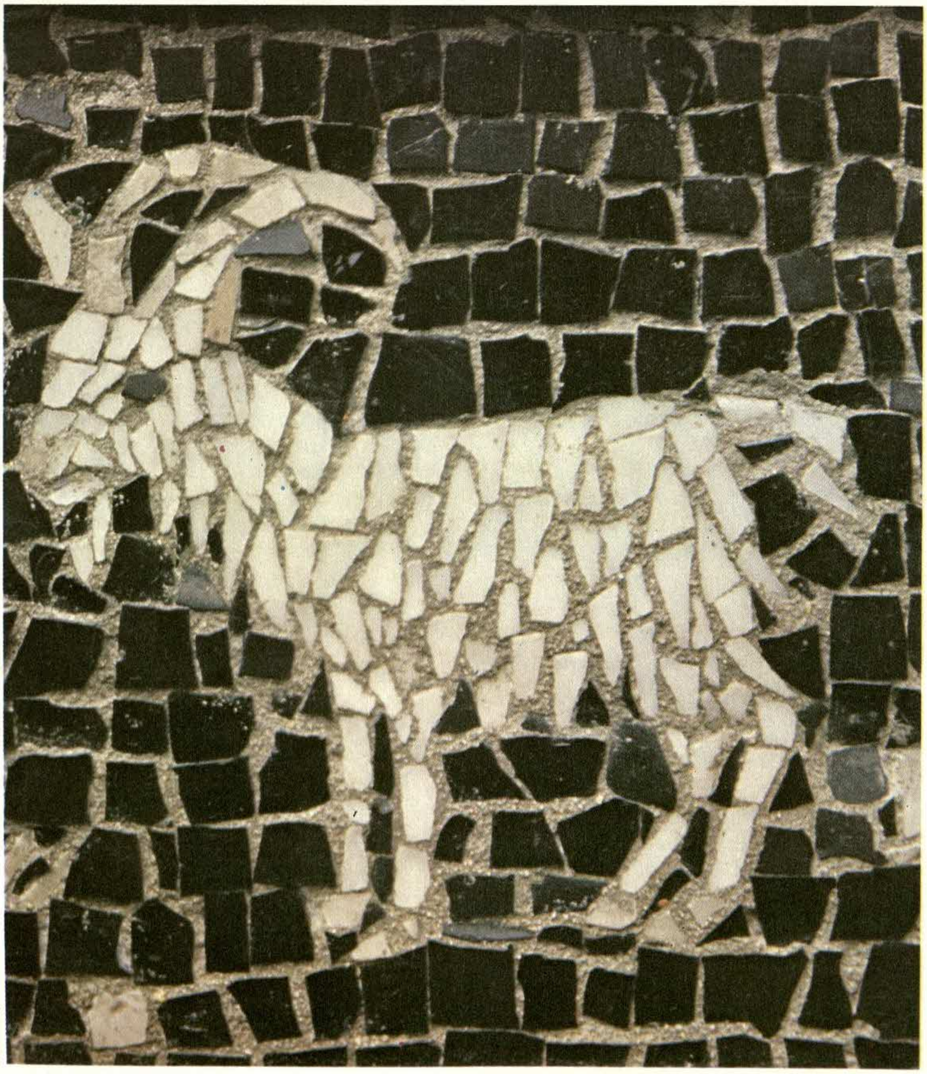
So far only indoor mosaic has been discussed. The combination of wood and cement plus PVA adhesive though strong and convenient to use indoors, is not really suitable for outdoor use. The contraction and expansion rates of glass, cement and plywood when subjected to weeks of rain and frost are so different that sooner or later they will part company. In order to make a table top or garden plaque that can be left out in all weathers the technique of sand and cement casting has to be mastered.

This goat, designed by Trata Maria Drescha, is a good project for beginners.

Beginner's project

It is best to practise the technique on a small scale. All the basic principles can be learnt by working on a piece no bigger than 15cm (6″) square. The goat (see illustration) can be traced and enlarged straight from the reproduction to make a practice project. Cutting the tesserae for the goat's hair should by now be well within your ability.

Having traced your design, secure the reversed tracing with sticky tape on any small piece of plywood you happen to have handy, leaving at least a 2.5cm (1″) surround. Cut and stick your mosaic as described in Mosaic chapters 2 and 3, pages 444 and 2016.



Geoffrey Frosh

Casting frame

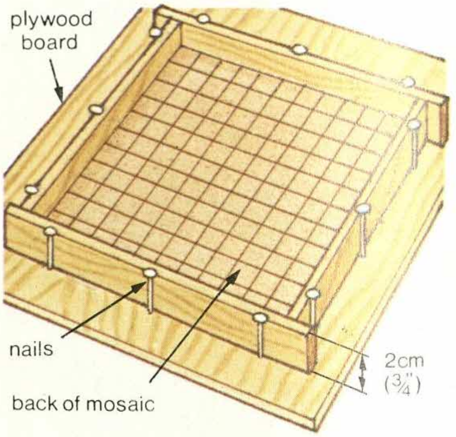
The function of the casting frame is only a temporary structure to make a neat 2cm (¾″) high wall to hold the cement in place while it sets. It does not have to be an exquisite piece of carpentry. It is essential that you construct the casting frame before mixing the cement.

You will need:

A hammer.
1 dozen 4cm (1½″) nails.
1m (3′) length of 2cm x 6mm (¾″x ¼″) softwood battening.

☐ Cut two lengths of batten exactly to size, in this case 15cm (6″).

☐ Cut two more lengths of about 18cm (7″) and construct a frame round the mosaic which will obviously have an overlap at the corners (fig.1).



1. *The frame is a temporary structure.*

☐ Bring the lengths of batten as close to the mosaic as possible and use the nails to hold them firm. Bend over the nail heads, or if they are large enough, drive the nail right down so that the head holds the wood. Do not attempt to nail through the wood or you will split it.

Mixing the cement

It is only worth buying cement and sand by the 50kg (1cwt) bag when you are working on large projects. If you already have some sand that is clean and pebble free this can be used. The proportion of your mix should be two parts sand to one part cement. Contrary to general belief more cement just weakens the mixture. Before actually mixing the cement check that the chicken wire comfortably fits the casting frame. Ideally do not cement during a heat-wave or during frosty weather.

You will need:

Casting frame.
Small bag of ready-mixed sand and cement.
Hammer.
15cm (6″) square of chicken wire.
Old plastic bowl.
Grease-free wooden spoon.

Bill McLaughlin

A fun idea for house decoration—mosaic featuring ashtrays and shells.

☐ In the old plastic bowl thoroughly mix 1kg (2½lb) of the sand and cement.

☐ Add water, a very little at a time, and stir constantly. When it looks about the consistency of garden earth after the rain, pick up a handful and squeeze it. If the resultant lump keeps the imprint of your fingers and your squeezing has brought a film of water to the surface, the cement is correctly mixed. Crumbling cement means it is too dry. Water oozing out between your fingers as you squeeze the cement is indication that it is too wet.

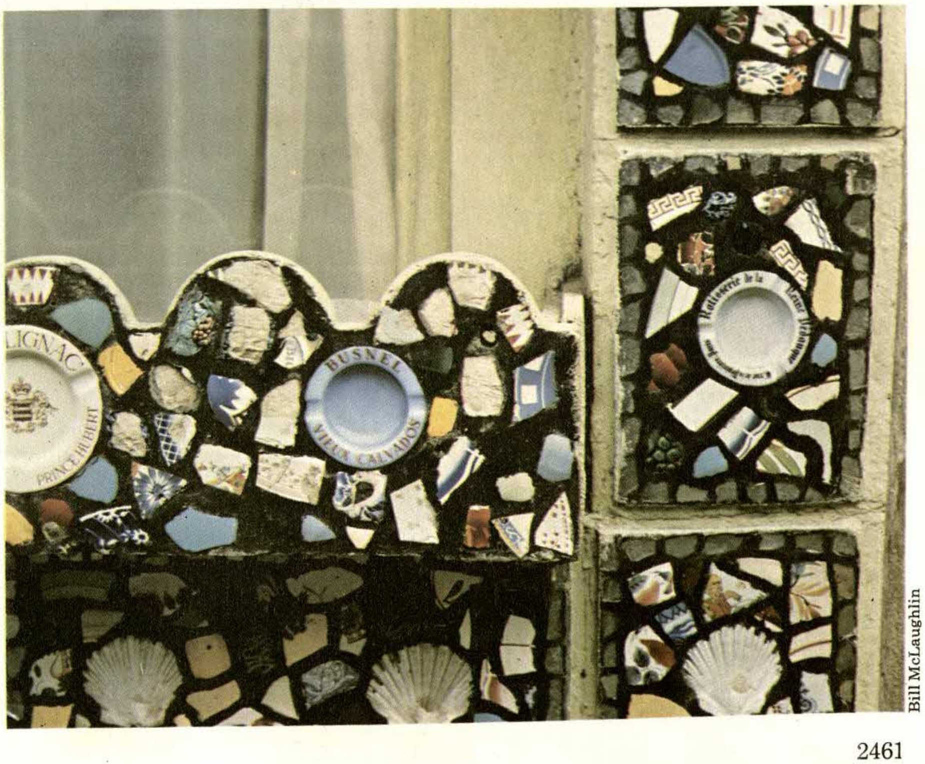
☐ When you are satisfied with the consistency, start spreading a 6mm (¼″) layer of cement mix on the backs of the mosaic stones with a palette knife. Press well into the joints.

☐ Then with a hammer, very carefully and systematically hammer the cemented surface all over, paying particular attention to the corners. If your hammer begins to pick up lumps of mosaic, dip its head in water and start again. There should be a neat series of pock marks where you have hammered.

☐ Put the chicken wire into the casting frame next and cover it with the rest of the mix. Fill your casting frame right up to the top and repeat the hammering. Water should now rise to the surface from the pressure of the hammering but it should not be oozing out from underneath the frame.

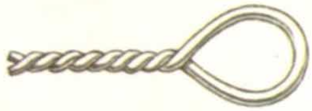
☐ To make the back of the cement level, take the remaining piece of battening, wet it thoroughly under the tap and use it as a straightening edge. Draw it across the top of the cement to remove any excess. Fill any hollows you see with a backwards and forwards motion, till you have a smooth surface. (You may need to wet your batten several times.)

Detail of the house decoration showing the pieces of china used as background.



Bill McLaughlin

Finishing. At this point if you intend to hang your plaque outdoors or to fix it in a permanent way to a wall you will need to attach a piece of galvanized wire. Twist it into a loop (fig.2) and bury the straight end well into the cement; at the same time bend the loop at a slight angle so that it stays clear of cement. Cover your work with a plastic sheet and leave it overnight. On no account move it or disturb it in any way; the setting time is really the most delicate stage of the whole operation.

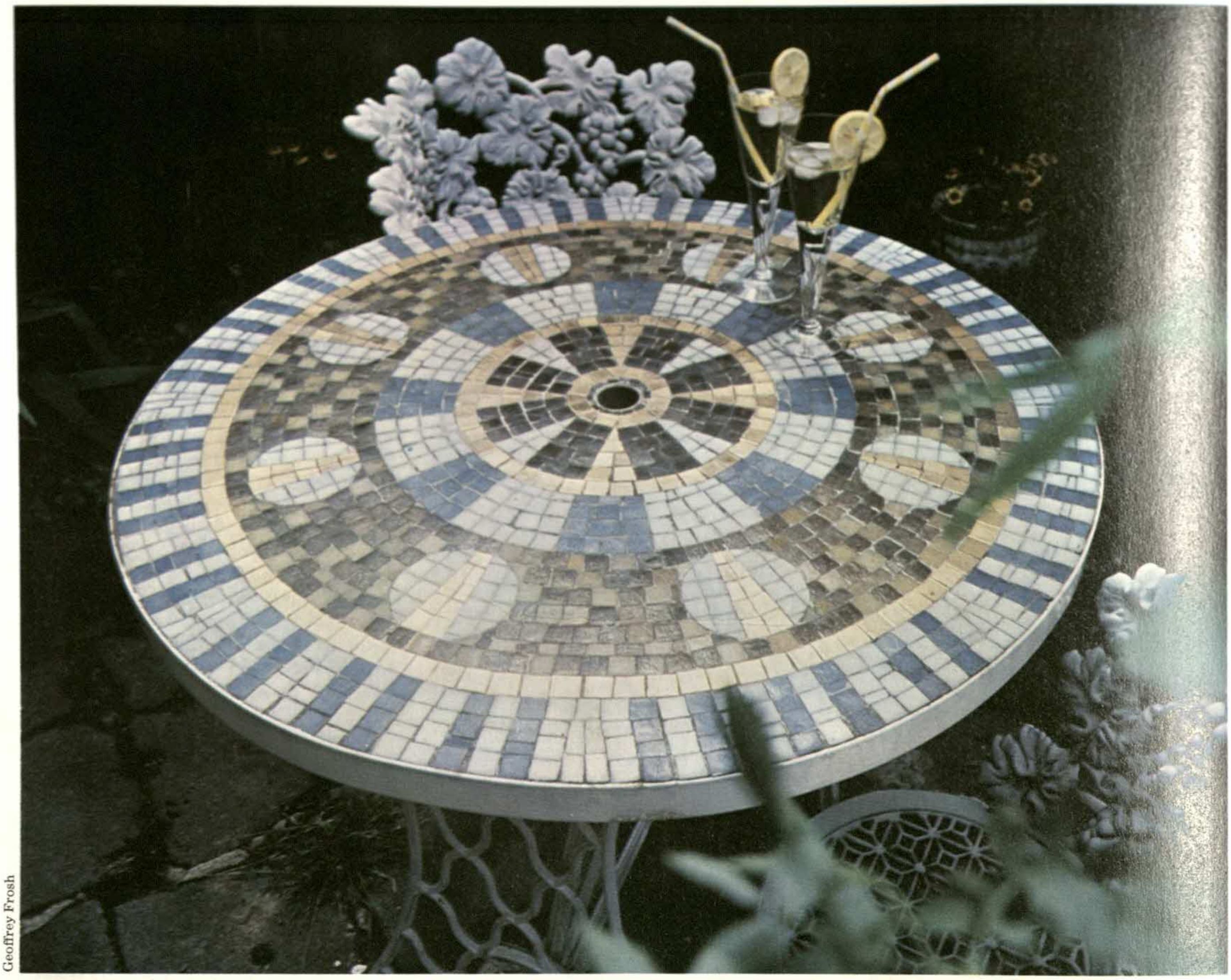


Paul Williams

2. *Galvanized wire twisted into loop.*

The following day, pour a small cup of water over the cement and cover it again. A hissing sound, as the cement eagerly soaks up the water indicates your mix was too dry or has set too fast due to very hot weather.

After five days, very cautiously remove the nails and ease the casting frame away from the sides of the mosaic. At this point you will appreciate the reason why the corners were not mitred or joined in any permanent way. Leave the sides to harden overnight, then take a board and turn your work over on to it. Clean off and grout. If you have done your hammering well, there should be hardly any places that need grouting.



The design for this mosaic garden table was created by Trata Maria Drescha.

Geoffrey Frosh

Fixing the plaque

You will need:

A wallplug.

A 4cm ($1\frac{1}{2}''$) screw (brass if possible).

A small cup of plaster of Paris.

☐ Fix the plug in the wall, insert the screw with its head protruding about 6mm ($\frac{1}{4}''$).

☐ Hang your mosaic from the screw by the wire loop.

☐ Once it is hanging mix the plaster of Paris. Start with half a cup of water and, gradually stirring with a palette knife, add more and more plaster until it is the consistency of custard.

☐ Holding the mosaic with the bottom against the wall and the top tilted well forward, pour in the plaster of Paris over the loop and screw head. Immediately straighten up the mosaic (plaster sets very fast). It should now be parallel to the wall. Hold it in this position until you can feel it has set.

Edging. If it is a rendered wall, the gap between mosaic and wall can be neatly filled with rendering, or a mosaic edge can be put round with plastic padding or a hardwood frame.

A garden table

Having practised on a small scale, you should now be able to tackle a garden table, though there are certain technical differences due to the change of scale.

The actual cementing process will be the same, though this time it will be worth while buying a 50kg (1cwt) bag of rendering and cement mix, such as Marley, and ask a friend to help with mixing and hammering. The mixing can be very tiring, but it is essential that it and the hammering are a continuous process.

You should make your mosaic at least 4cm ($1\frac{1}{2}''$) thick. You will have to reinforce the mosaic with expanded metal. Sheets of this can be bought at most ironmongers. To cut the metal you will need a pair of wire cutters or tin snips.

The large cement mosaic block will need to dry for two or three weeks and will probably need two people to turn it.

As the cement depth will be greater, the first layer should be 2cm ($\frac{3}{4}''$) thick, before adding the metal reinforcement. This means your battening will have to be correspondingly deeper, 4cm x 2cm ($1\frac{1}{2}''$x $\frac{3}{4}''$).

Plaster casting frame

Should you wish to make a round or an oval table and you cannot find a blacksmith to make you an iron band for the edging there is a very simple way to make a retaining edge in which to set your cement.

You will need:

A pair of scissors.

Several old cardboard packets (cereal packets are ideal).

Tin-tacks.

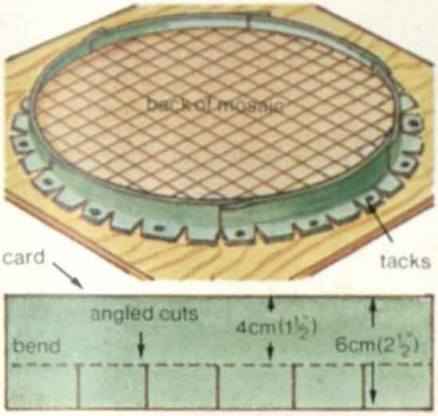
Hammer.

Plaster of Paris.

☐ Cut the cardboard packets into strips 6cm ($2\frac{1}{2}''$) wide, making each one as long as possible. Measure 4cm ($1\frac{1}{2}''$) down the depth of each strip and rule a line.

☐ Bend each cardboard strip along the

line to form a right angle. Make angled cuts into the 2.5cm (1") part of the cardboard strip (fig.3). It is now possible to fit the cardboard round any shape.



Paul Williams

3. *Casting frame made from cardboard.*

☐ Fix the cardboard round the prepared mosaic (which is on a plywood board) and at regular intervals tack it into place.

☐ Mix the plaster of Paris and spread it with a palette knife to cover the tacks right up to the card. Once it has set you will have a rigid wall to hold your cementing. The plaster of Paris is so hard you will have to chisel into it when you want to remove it.

Edging for the table will have to be a double row of mosaic to cover the 4cm (1½") depth. The simplest way to apply it is to buy your ceramic already papered and cut it into 30cm (12") long strips two stones wide. Spread the plastic padding a little at a time along the edge and press in your mosaic, paper towards the outside. When set wash off the paper and then grout.

For the base an old sewing machine stand painted white is suitable. For a round or rectangular table a concrete tube section can be used.

Note: if you live in an area where severe frosts are common it is an advantage to have the top and bottom of the table separate, so the top can be taken off and stored.

Flooring mosaic

It is not advisable for an amateur to attempt to lay an exterior mosaic floor. Levelling the cement bed and making sure that the joints line up is a job demanding a great deal of experience. Glass mosaic is neither strong nor thick enough for flooring.

If you have a patio or terrace floor to be covered in mosaic, make a design; paper it up and find a professional tiler to help you lay it. It is advisable to keep your design fairly simple; the flooring mosaic is much harder to cut than vitreous mosaic and you can very easily finish with blistered hands.

Pebble mosaic. There is a very basic form of flooring mosaic well within your ability—pebble mosaic.

This will make a delightful garden path or cover a bare patch of concrete. Either buy your pebbles by the sack from a gravel pit or, if you live close to the sea, use the pebbles on the beach. The pattern (overleaf) on the pebble mosaic bank took a week to create. Four sacks of pebbles were used and 152kg (3cwt) of rendering and cement mix, such as Marley.

Sort the pebbles. They should be graded into size and colour. Once you have an idea of what you have you can plan your design. If you can, buy pebbles that are already graded—it is well worth the extra cost.

Before mixing the cement draw out your whole design on the prepared concrete patch, either using tailor's chalk or diluted paint. Mix your cement a bucket at a time.

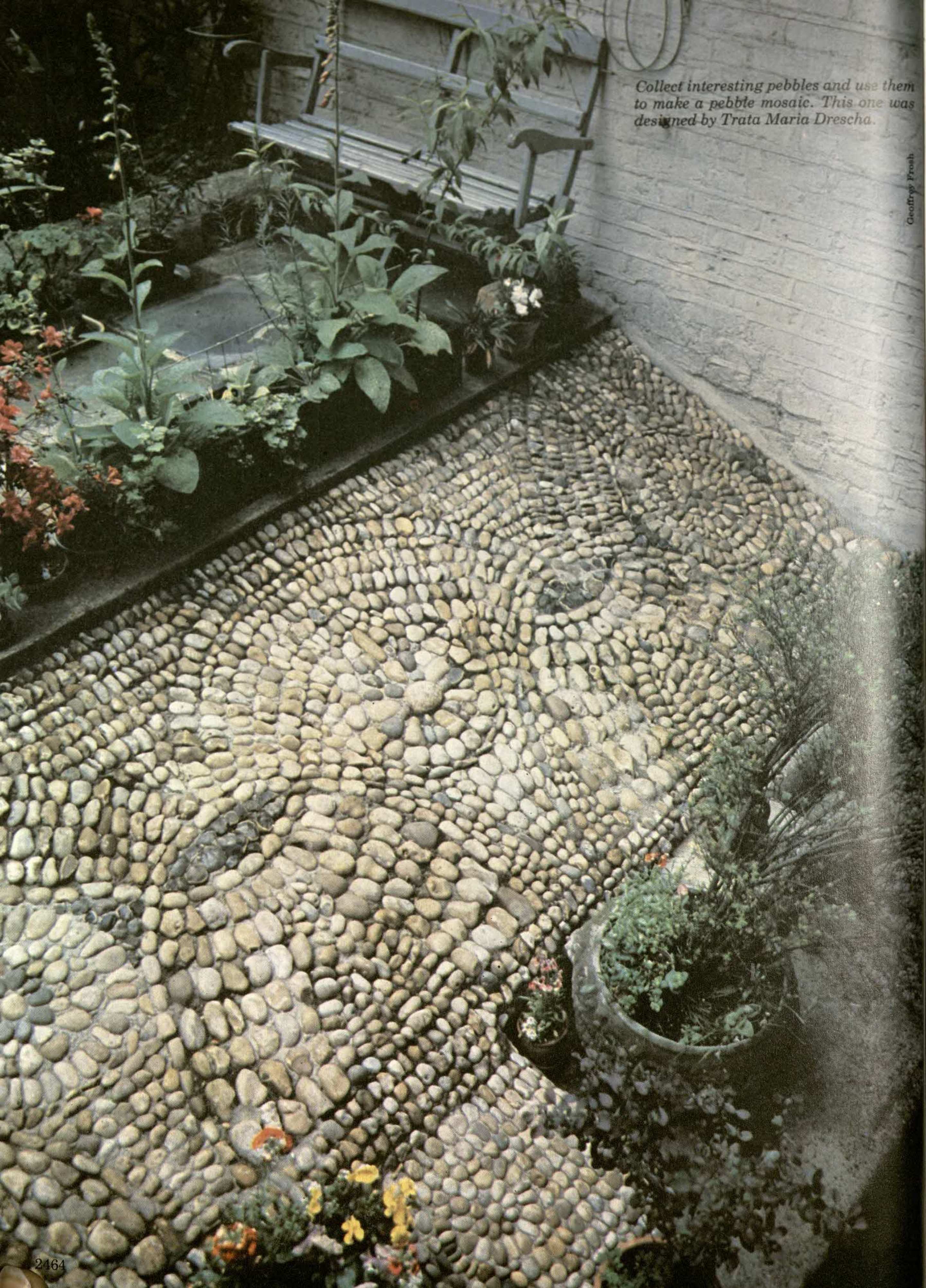
Spread one part of the pattern with 2.5cm (1") thickness of the mixture.

Set your pebbles about 2cm (¾") deep. If they sink right in, your cement mix is too wet. It is best to start in an unimportant corner of the design until you are used to the technique. Try not to get the cement on the top surface of the pebbles as it will spoil the design. At the end of a day's work cut back any cement round the edges so there will be a clean join between one part and the next.

Moss will sometimes grow in the joints. This is not always a disadvantage as it can enhance the design.

Mary Seyd

An unusual mosaic made of sea shells using the pebble mosaic method.



Collect interesting pebbles and use them to make a pebble mosaic. This one was designed by Trata Maria Drescha.

Geoffrey Frosh

Cobalt
Tint